MEASLES OUTBREAK IN THE PACIFIC - SITUATION REPORT No. 11 Joint WHO/UNICEF Measles Outbreak Response and Preparedness in the Pacific

Reporting date:	22 January 2020
Reporting period:	5 January 2020 - 19 January 2020

Event highlights

- A low level of transmission continues in American Samoa, Fiji, Samoa and Tonga, but overall the situation has stabilised.
- The priority in Fiji and Tonga is to conduct rapid Supplementary Immunisation Activities (SIA) coverage assessments to ensure closure of any remaining immunity gaps among target populations and to prevent additional sporadic cases.
- Samoa is undertaking digitisation of all the available immunisation records to assess the vaccination load of the school campaign. The frequency of Emergency Operation Centre team meetings and situational reporting has reduced to 3 times per week.
- Kiribati measles-specific triage and isolation facilities have been discontinued and returned to previous use. Strengthening of early warning and surveillance is ongoing.
- The situation in other Pacific Island Countries and Territories (PICs) is being closely monitored, with on-site and remote support provided as required by WHO, UNICEF and other partners.

Summary by PIC - as of 19 January 2020:

- American Samoa (12 cases, 0 deaths): two new cases measles cases have been reported in the last 14 days. Three suspected cases are pending laboratory results from Hawaii State Laboratory.
- Fiji (28 cases, 0 deaths): one new case has been reported in the last 14 days in the Central Division. The outbreak has been declared over in Serua/Namosi subdivision (i.e. over two incubation periods have elapsed since the last case indicating that transmission has been interrupted). SIA coverage in areas with ongoing transmission is subject to review following rapid coverage assessments.
- **Kiribati (3 cases, 0 deaths):** one new laboratory confirmed measles case has been reported in the last 14 days. No local transmission has been demonstrated.
- Samoa (5,707 cases, 83 deaths): 10 new cases and two new deaths were reported in the last 14 days. Samoa is now moving towards the recovery phase. Emergency Medical Teams (EMTs) are scaling down and only four teams remain in-country.
- Tonga (640 cases, 0 deaths): five new cases were reported in the last 14 days. Sporadic transmission continues but is confined to Tongatapu and Vava'u. Eua island has interrupted transmission with the most recent onset date of 8 December 2019.

Pacific Regional:

- Overall measles risk in other PICs has been downgraded to moderate / moderate-low due to the declining risk of importation from other measles affected countries in the region.
- Emphasis remains on all-hazard emergency preparedness in most PICs, aligned with APSED III and strengthening IHR core capacities.

- The exception is the Republic of the Marshall Islands (RMI) which is assessed as moderate-high due to a concurrent dengue outbreak (DENV-3) which is overwhelming existing case management capacity. Additional EMT support to respond to the outbreak is urgently being mobilised from within the region at the request of the MoH.
- Availability of vaccines is currently monitored by UNICEF and WHO (**Table 3**) and a contingency plan is in place in case of additional demand.

Other emergency events in the PICs region

- Natural hazards:
 - Tropical Cyclone Tino was classified as category 1 system and made landfall in Fiji on 17
 January. This further intensified to a category 3 system before reaching Tonga on 19
 January. Niue, Samoa, Tonga and Tuvalu were also in the path of the cyclone with some infrastructure and/or agricultural losses.
 - Bushfire clouds from Australia present an environmental hazard in the region.
- Infectious hazards:
 - Novel coronavirus outbreak in China is being carefully monitored due to risk of international spread.
 - Ongoing dengue outbreaks in PICs: Cook Islands, Guam, Kosrae and Yap States in the Federated States of Micronesia (FSM), French Polynesia, Palau, RMI, and Wallis & Futuna.
 - Influenza A outbreak in RMI.
 - Acute diarrhoea and vomiting (ADV)/rotavirus RDT-positive cases in Kiribati.

Situation update

The overview of declarations of outbreaks and states of emergency is summarised in **Table 1**; the epidemiological situation in **Table 2**, and further summarised by country below.

Table 1. Overview of declarations of outbreaks and estate of emergency, in Pacific Islands Countries and areas with measles cases, as of 19 January 2020.

Country	Outbreak declared	Outbreak days	State of emergency declared	Emergency days
American Samoa	8 December 2019	43	8 December 2019	43
Fiji	7 November, 2019	74	No	NA
Kiribati	No	NA	No	NA
Samoa	16 October 2019	96	15 November - 28 December 2019	50
Tonga	22 October, 2019	90	No	NA

Legend: NA = not applicable.

Table 2. Overview of the reported number of measles cases, morbidity and mortality and trend, in Pacific Islands Countries and Territories with measles cases, as of 19 January 2020.

Country	Reporting date	Reported cases	Reported deaths	Case-fatality rate*	Trend
American Samoa	19 January 2020	12	0	0%	Stable
Fiji	18 January 2020	28	0	0%	Stable
Kiribati	19 January 2020	3	0	0%	Under investigation
Samoa	19 January 2020	5,707	83	1.5%	Decreasing
Tonga	18 January 2020	640	0	0%	Decreasing

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

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

Country	Total MCV received in country since 01 Oct (doses)	Scheduled Deliveries (as of 19 January 2020)
Cook Islands	4,000	0
Fiji	735,000	0
Federated States of Micronesia	20,000	10,000
Kiribati	19,000	0
Nauru	3,000	0
Niue	2,000	0
Republic of the Marshall Islands	7,500	0
Samoa	265,500	0
Solomon Islands	60,860	0
Tonga	68,000	0
Tokelau	2,000	0
Tuvalu	9,500	0
Vanuatu	80,000	0
Total	1,276,360	10,000

American Samoa

- As of 19 January, a total of 12 confirmed cases have been reported. Three suspected cases are still pending lab results. Date of rash onset for the last confirmed case was 31 December 2019.
- No deaths have been reported.

Fiji

- One new case (10-month-old infant) was reported in the last two weeks, taking the total to 28 cases. All cases are from Central Division. No deaths have been reported.
- In December 2019, the Central Division reached 95% measles vaccination coverage for six months to five-year-old and 19-39-year-old target groups. A rapid coverage assessment (RCA) took place to verify this coverage and found several missed households. Because of these RCA results, Ministry of Health & Medical Services (MHMS) is reviewing the need to repeat SIA activities in low coverage areas with ongoing transmission.
- Western, Northern, and Eastern Divisions continue to focus on reaching people through house-to-house visits and at health centres, with the aim of vaccinating at least 95% of people in the target groups.

Kiribati

- One new laboratory confirmed measles case was reported during the last 14 days bringing the total to three laboratory confirmed cases.
- No evidence of local transmission has been established.
- A targeted vaccination campaign is ongoing at the MR clinic that was established by the MHMS.
- The triage area in the main hospital has been discontinued due to the reduced level of risk. The isolation clinic has also been returned to its prior use.
- The Measles and Diarrhea Outbreak Taskforce Meeting now takes place once a week on Fridays.
- Kiribati is also experiencing an acute diarrhoea and vomiting (ADV)/rotavirus outbreak.
 Emergency interventions in four villages, several affected communities (Maneabas) and households took place week. Priority activities included strengthening surveillance, risk communications (use of oral rehydration salts [ORS], treated water etc.), community education, and community monitoring and early referral of cases to hospital. Planning for activities to be implemented in all villages in south Tarawa are ongoing.

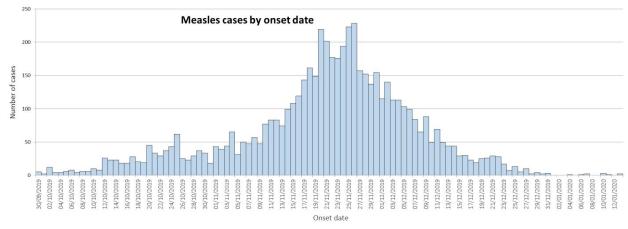
Samoa

- The number of reported measles cases per day is rapidly decreasing and the situation is stabilizing (Figure 1).
- 5,707 measles cases have been reported as of 20 January 2020, including 10 new cases in the last two weeks.
- There has been a total of 83 measles-related deaths (87% under five-years of age). Two deaths were reported in the last two weeks. There are currently no measles admissions in hospital.
- Mental Health Psychosocial Support (MHPSS) continues to focus on meeting the psychological and physical needs of affected families.
- Mass media campaign for measles using TV, radio and social media are ongoing.
- Four EMTs remain in country (New Zealand Red Cross, UNFPA, Samoa Doctors Worldwide, PACMAT).

- Mass vaccination campaign has ended and has attained good coverage, but surveillance is ongoing.
- Routine immunisation is continuing through health facilities as well as outreach activities.
- UNICEF worked with MoH to review the immunization policy and the existing draft was revised considering the recent developments, new vaccines scheduled to be introduced in the country and changing scenario.
- UNICEF continues to provide technical support to strengthen the routine immunization program and facilitate the introduction of new vaccines in the routine immunization program, a new draft immunization guide for Health workers has been developed.
- UNICEF worked with the MoH and WHO to develop the Expanded Programme on Immunization (EPI) recovery plan.
- UNICEF provided technical inputs for the training plan developed for the training of nurses on the use of single dose MMR.
- Estimation of vaccine and logistics requirements for the school catch-up campaign was facilitated by UNICEF for procurement.

Figure 1. Epicurve - Measles in Samoa by date of onset, date of report: 19 January 2020 (N=5,707).

Source: Health Emergency Operations Centre (HEOC) Situation Report, Ministry of Health Samoa; Incident Name: Measles outbreak - October 2019; Sitrep No. 60



Solomon Islands

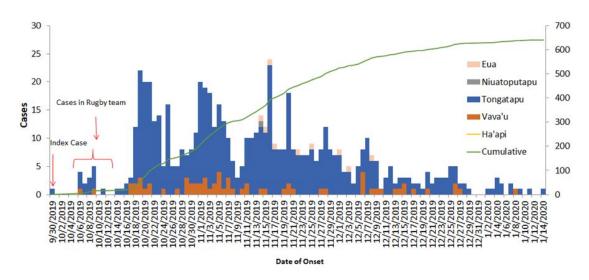
- Vaccination campaign is ongoing at the National Referral Hospital for travellers and overseas students.
- Travel advisory is still in place and surveillance at the airport is further strengthened with additional personnel.
- Ministry of Health is working on a memorandum of understanding (MOU) for streamlining private clinic participation in vaccination and surveillance activities.

Tonga

- As of 19 January, a total of 640 cases (including 52 lab confirmed) and zero deaths have been reported since the beginning of the outbreak. There were five new cases reported in the last 7 days.
- There is a downward trend in reported case numbers in Tonga, with fewer new cases being reported in recent weeks (Figure 2).

- Most of the cases have been reported in Tongatapu and Vava'u Islands where there is ongoing but waning transmission.
- Mass vaccination campaign started last week of targeting children 2-9-years-old. Activities also
 continue to complete the zero-dose vaccination as well as continuing vaccinating new contacts
 of new measles cases.
- The first targeted mass vaccination campaign of 10-24-year-olds was conducted on 26 November 2019, and 17 December 2019 through 31 December 2019. A total of 22,791 persons were vaccinated during the campaign on the Islands of Tongatapu, 'Eua, Ha'apai, and Vava'u.
- An additional vaccination campaign of children under 10-years-old who were not included in the previous campaign is ongoing since 14 January 2020. These SIAs are closing residual immunity gaps and providing boosting of measles immunity against a very high routine measles vaccination coverage rate.
- As of 16 January 2020, a grand total of 33,741 persons have been vaccinated, representing ~75% of the population.
- A three-person WHO and GOARN team is working with the Tonga MoH to support the measles outbreak response.

Figure 2. Epicurve Measles in Tonga by date of onset, by island and date of report: 17 January 2020 (N=640). Source: WHO & MoH Tonga.



Vanuatu

- MoH conducted a Training of Trainers (ToT) workshop for 12 health workers on measles response activities.
- Following on the SIA that was conducted in Sefa in December 2019;
 - UNICEF provided technical support for a National ToT on Measles outbreak preparedness and response to 15 health managers, program managers, surveillance officers and health promotion officers.
 - UNICEF has started the preparation work providing technical and operational support for a three-days vaccinator training in Santo targeting the vaccinators and supervisors.
 - UNICEF has also started providing technical and financial support for the measles vaccination campaign in Santo.

- UNICEF has worked with the MoH providing technical guidance and inputs for a two-day microplanning training for the province of Tanna targeting vaccinators which will be conducted in February 2020.
- UNICEF continues to monitor the distribution of immunization supplies to provinces with priority to Santo and Tanna province.
- UNICEF continues to provide technical guidance to update measles communication messages in social media, including monitoring and reply to queries and comments.

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 1-10 for updates on previous activities: https://www.who.int/westernpacific/emergencies/measles-outbreaks-in-the-pacific

Leadership & Coordination

- Technical expertise continues to be deployed to PICs through partnership of WHO, UNICEF, CDC, SPC and Global Outbreak Alert and Response Network (GOARN).
- Three levels of WHO (CO, DPS/WPRO and HQ) continue to be involved in the leadership and coordination of the response.
- Continuous monitoring and coordination with respective MoHs in all the PICs has been maintained, as well as joint risk assessments for measles in non-affected countries.

Risk communication and social mobilization

- WHO and UNICEF continue to support risk communications in PICs using the WHO/UNICEF Pacific Measles Communication Toolkit and implementing paid social media campaigns to boost measles messaging via an online platform.
- To date, 15 PICs (inclusive of PNG) have adapted and implemented the toolkit, with various products used for health workers, travellers and the public.
- WHO has supported the design and implementation of paid MoH measles social media campaigns currently ongoing, or scheduled, Tonga, Fiji and Samoa.
- WHO UNICEF has recently released a joint statement on the Pacific measles situation, detailing the
 reduced risk of measles transmission due to Pacific countries' activities to strengthen immunisation
 coverage and implement outbreak response interventions.

Health Operations & Technical Expertise

- WHO provides ongoing on-site and remote technical assistance and EMT-coordination for Kiribati,
 Tonga, and other PICs that require support through DPS. Scheduled EMT orientation workshops are
 incorporating measles simulation exercises and hospital "walk-throughs" to map patient and
 information flows to strengthen triage, case isolation facilities, general infection prevention and
 control and communications between clinical care and public health in the event of measles and
 other infectious diseases. See FSM below.
- WHO also provides guidance on the interpretation of laboratory results in the epidemiological context of the cases, as well as for measles surveillance, in Fiji, Kiribati and Tonga.
- The network of Operational Support and Logistics (OSL) colleagues in PICs, DPS and WPRO have developed a tool to ensure all supply management is tracked consistently at all levels in real time. This will ensure awareness of available stocks, what has been requested, what is in the pipeline, and what has been delivered to where.

American Samoa (United States), the RMI, Solomon Islands and Tokelau have formally notified WHO
of additional measures against measles at international points of entry under Article 43 of the IHR
(2005).

FSM

- WHO and the Department of Health & Social Affairs (DHSA) held a country preparedness workshop in FSM from 13-17 January.
- The emphasis was health emergency preparedness, with a focus on infectious hazards including measles.
- The workshop included participants from US CDC and UNICEF and included a table-top simulation exercise and walk-through of Pohnpei State Hospital to simulate response actions in an outbreak scenario. It provided an opportunity to strengthen health security capabilities in Pohnpei State and nationally, including surveillance, case management, infection prevention and control and risk communication, among other areas.
- The results will be used as a basis for developing an all-hazard preparedness action plan for the coming 3-6 months.

Kiribati

- The WHO and UNICEF teams on the ground continue active surveillance and case finding, detection
 of suspected measles cases, contact tracing and vaccinations in outer Islands.
- A WHO health logistician remains deployed in Kiribati and has been extended until mid-March 2020.
 Support includes; mapping of health facilities and communication infrastructure, coaching and monitoring of sample handing, transportation for longer-term structural improvements in communication, and logistics for the outer islands.
- A WHO risk communication specialist was deployed to Kiribati (12 January 13 February 2020) to support with implementation of a risk communication and community outreach programme (targeting Tarawa and six outer islands) for measles, routine immunisation, WASH and to support event-based surveillance.

Samoa

- WHO is providing on-site technical support for the mental health and psychosocial support planning and implementation in Samoa.
- A risk communication officer and vaccine hesitancy specialist from the Australian Regional Immunisation Alliance (ARIA) was deployed to Samoa (12–22 January 2020) to support in recovery phase with addressing issues of post-measles infections and operationalising the new mandatory vaccination requirements for school-based entry; and reform of the routine immunisation programme.
- Emergency Medical Teams (EMTs) provide and support service delivery, psychosocial support, and vaccination delivery in Samoa, and are now scaling down.

Tonga

- There is monitoring of ongoing transmission and supporting the re-starting of laboratory testing for surveillance.
- See Tonga Situation Update above for vaccination campaign information.

Next steps

Pacific Region

- Continue technical support both in-country and remotely for all pillars of response, with planning for business continuity until March 2020.
- An internal WHO training on procurement, supply and stock management is planned for next week
- WHO will determine essential stock required in DPS to support emergency preparedness and response in PICs.
- Preparedness and action-planning work for the next 3-6 months is being determined in other priority PICs.
- In preparation for an after action review and the Pacific Health Ministers meeting in April 2020 WHO is preparing key documentation, SIA data and other key statistics to detail preparedness and response actions taken by PICs from April 2019 to date.
- WHO will recruit a consultant from 27 January 31 March 2020 to provide ongoing support in the information and planning function of the measles Incident Management Team in DPS.
- Continued support to PICs for risk communication preparedness, and measles communication follow up.

Fiji

• Following the implementation of rapid coverage assessments (RCA) in Suva, the methodology will be expanded to other Divisions to assess coverage of SIA campaigns.

Federated States of Micronesia

- The tentative dates have been set for the upcoming Mass Measles SIA/Vitamin A Campaign in the age group six-months to six years-old in the following order; Pohnpei: 20 January 7 February; Yap and Kosrae: 27 January 27 February; and Chuuk: 10 February 10 March.
- UNICEF released an additional 10,000 doses of MCV scheduled to arrive this week.

Kiribati

• UNICEF is planning to recruit a Risk Communication Specialist.

Republic of the Marshall Islands

 An outer Islands measles and seasonal flu campaign has been scheduled to start from the fourth week of February to the second week of April 2020. UNICEF is working with MoH to provide technical and logistic support for the campaign. UNICEF provided immunization supplies to conduct the campaign.

Samoa

 Continued support to Samoa for ongoing risk communication needs, including investment into building risk communication capacity of MoH and other sector partners. Investigation into sourcing a short-term consultant (STC) or Australian volunteer for an extended assignment (3+ months).

Solomon Islands

 Measles Outbreak Preparedness and Response Plan of the MHMS has been developed. The document will be submitted to the MHMS executive for endorsement.

Tonga

- In mid-December 2019, WHO and the Samoa MoH invited the US CDC to assess the nature of the unique measles outbreak among teens and young adults in Tonga that suggested waning immunity or secondary vaccine failure. The initial assessment reviewed changes in vaccination schedule, cold chain and vaccine management issues, and intensity of exposure. The CDC team is in negotiations to return to Tonga at the end of January for four weeks to better study the intensity of exposure. They plan to: 1) thoroughly analyze the line list with vaccination histories and, 2) conduct a case-control study comparing breakthrough cases to twice vaccinated persons that did not get measles.
- A WHO short-term epidemiologist will be deployed to Tonga through GOARN, from 22 January 5
 February, to support MoH in conducting rapid SIA coverage assessments and in strengthening ongoing case investigation and surveillance activities.

WHO/UNICEF weekly coordination meeting

Wednesday 22 January 2020 was the final meeting at this point in time. As such, this will also be the final sitrep.

Acknowledgements

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