Webinar: Making Immunization Interventions Successful June 2020

Samoa - 2019
Measles Outbreak and Response

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Content

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• Samoa – Introduction
• Pre-outbreak immunization rates
• A Measles outbreak – how it happened
• Response to the Measles Outbreak
• Lessons learned
Upper-middle income
Independent since 1962
80 percent live in villages
20 – 40% of children are susceptible to measles, rubella & mumps.
Coverage

Measles-containing vaccine and DTP coverage,
Samoa, 2000-2018

Source: WHO UNICEF Joint Reporting Form
Timeline of Deaths Following MMR Vaccination at Safotu District Hospital, Savaii, Samoa
06th July 2018

1st Baby
- MMR Vaccinated
- 1st Baby developed AEFI
- Resuscitation of 1st Baby
- 1st Baby pronounced dead
- Between 10:15-10:30

2nd Baby
- MMR Vaccinated
- Resuscitation of 2nd Baby
- 2nd Baby developed AEFI
- 2nd Baby pronounced dead
- Another child vaccinated with Pentavalent Vaccine – no reaction

Notes: Times are given based on either hospital records or/and staff statements
# Adverse Events Following Immunization: Timeline

| Year | Vaccination Event | MMR Suspension | Investigation and Litigation |
|------|-------------------|----------------|-----------------------------
| 2018 | Vaccine administration error | 6 July | 7 July | 2018 remaining |
| 2019 | MMR resumed fully | Nurses sentenced | Measles Outbreak in New Zealand | Measles Outbreak in Samoa | State of emergency begins | State of emergency ends |
|      | 15 April | 31 July | 16 Oct | 15 Nov | 28 Dec |

*Mixed reports of other vaccines being suspended.

[Family of children who died tell of the event: RNZ](https://www.youtube.com/watch?v=OPiX7ZL2iPc)
Last Sitrep #60 – Measles Morbidity/Mortality

As of 19 January 2020
In 2019, the Pacific island country of Samoa with a total population of approximately 200,000 people experienced an unprecedented outbreak of measles. Between October 2019 and January 2020, the country reported more than 5700 cases, 83 measles-related deaths and more than 1800 hospitalizations.

18 international Emergency Medical Teams (EMTs) deployed to support Samoa's measles outbreak response.

557 total EMTs personnel deployed to support Samoa measles outbreak response.

- 293 nurses
- 162 doctors
- 58 support staff
- 22 midwives
- 21 allied health professionals

Working hand-in-hand with Samoan health workers, EMTs provided support in:

- Measles case management
- Vaccination
- Epidemiology and surveillance
- Provision and maintenance of medical equipment and supplies
- Mental health and psychosocial support to staff and patients

134,499 individuals vaccinated against measles in a massive campaign over several weeks.
Measles outbreak response in Samoa: MR SIA coverage by the age group

6 months - 4 yrs: 89%
5-19 yrs: 99%
≥20 yrs: 100%
≥6 months: 98%

21 December 2019
Mandatory vaccination legislated (Dec 2019)

- Fully immunized child as a prerequisite for school enrolment
- Heavy fines on schools not observing the legislation
- Restoring records and catching up campaign in place
Lessons learned

– Sliding down immunization rates in recent years, particularly for MMR, increased a chance of outbreak.
– Suspension of MMR vaccination for 9 months (due to AEFI) increased susceptibility to Measles particularly among very young children.
– Low uptake immunization rates immediately after lifting the ban on MMR vaccination.
– An outbreak in the neighborhood with frequent travel between the countries increased chance of infection being imported (required increased vigilance, surveillance).
– Anti-vaccination campaigners (online and in-country), especially after AEFI in 2018, contributed to mistrust in the health system
– Vaccines work! In 2020 immunization rates are back on track