



P.O. Box 59
Nuku'alofa, Tonga
Phone: (00676) 23-200, 28-233
Fax: (00676) 24-291

MINISTRY OF HEALTH
GOVERNMENT OF TONGA

SITUATION REPORT

Tonga Measles Outbreak 2019

SITREP Number: 3
Date of Issue 29/10/2019

1. Summary of Situation

Background

An outbreak of measles has occurred following the return of a squad of Tongan rugby players from New Zealand where one player developed measles. Twelve other players were in the incubation period of the illness during travel back to Tonga and developed symptoms on 6th- 9th October. The diagnosis was laboratory confirmed for 6 players tested. Boys in the touring squad came from the following schools and locations: Tonga College 'Atele (TCA), Tupou College Toloa (TCT) (a boarding school), Tonga High School (THS) and a small number from other schools on Tongatapu and the islands of Vava'u, Ha'apai and 'Eua.

The outbreak has involved students (mainly) from schools on Tongatapu as well as students from Vava'u High School. There is currently no evidence to suggest that new lines of transmission have occurred. Cases are epidemiologically linked to the initial imported cases.

The Ministry of Health Epidemic Task Force has been convened comprising public health, clinician and laboratory representatives to advise on the management of the outbreak.

Note: Refer to earlier SITREPS for further detail of the initial cases and response.

2. Current Situation

As at 28nd October, 107 cases of confirmed or suspected measles have been identified in Tonga. Clinicians have reported that cases are generally experiencing a mild illness.

The attached charts outline the results of analysis of current case information. The epidemic curve presents a picture of a propagated outbreak matching the incubation period for measles. It is too early to say if the curve shows evidence of outbreak control. Teenage males predominate as cases, consistent with the likely transmission of disease through the boy's schools. Three of 5 cases in females have been in the 15-19 age group, another less than 6 months of age and another 23 years old. Predominate symptoms include rash (96% of cases) and fever (76% of cases).

Two cases have been admitted to Vaiola Hospital and one admitted in Prince Ngu hospital, Vava'u. All admitted cases have recovered well or are recovering well. No serious cases of disease or deaths have been reported from the outbreak. No cases of measles have been reported amongst health care staff.

Key events/ issues since last SITREP

- Further laboratory testing at LabPlus in Auckland of samples from the rugby squad has found that of 6 players testing positive to PCR, all demonstrated IgG+/IgM- results on serology testing. This is indicative of waning immunity with the infections breaking through the existing protective antibodies. With some of the

boys having a two-dose vaccination history with MR vaccine, this is a concerning development. Samples will be forwarded to VIDRL for further testing.

- An outbreak linked to members of the touring rugby squad has occurred in Vava'u. As at 28/10/2019 a total of 12 cases (two rugby players and 10 contacts) have been identified in Vava'u. Details of these cases are not shown in the charts below since an internet outage prevented the transfer of information on the cases. (See below for further actions)
- The IHR National Focal Point (NFP) for Tonga (Dr Siale) received notification of a player (20 y/o male) in a Tongan Futsal team who was diagnosed with measles after arriving in NZ on 14th October. It is believed he contracted the illness in Tonga. Symptoms began on 18th October and a rash appeared on 20th October. A sample taken on 22nd October for PCR was positive. The rest of the squad flew to New Caledonia. The NFP in New Caledonia was contacted by NZ NFP. It is unclear what measures were taken with the squad prior to leaving NZ.

Actions Taken:

- A measles response protocol and case investigation form has been completed
- Samples and information arising from tests at LabPlus from the first batch of samples has been sent to VIDRL for further analysis.
- Samples have been collected from 18 people suspected of having measles. Samples will be sent to the laboratory at VIDRL, Melbourne on 29/10
- 2500 doses of MR vaccine have been ordered through UNICEF are due to arrive 29/10
- On Tongatapu, Health Officers and District Health Nurses have been engaged to support the follow-up of cases and contacts and completion of details on case investigation forms.
- Identification of measles vaccination histories of cases has proved challenging
- An information bulletin has been developed for Tonga Government Ministries, country Missions and relevant stakeholders on the measles outbreak
- A measles fact sheet in the Tongan language has been developed and distributed
- IEC materials on measles have been received from WHO. Key target groups for the messages are travellers, health care workers and the general public. Yet to determine how materials will be used locally.
- Vitamin A stocks have been assessed
- In response to a request from the NZ MFAT, a list of required consumables and other goods has been prepared
- On Vava'u, health officers and district health nurses, with advice from the Communicable Disease Unit, have undertaken case and contact management, vaccination of 68 HCWs, post exposure vaccination for 48 and vaccination of students in Forms 5 and 6 (approx. 200 students).

Actions to be Completed:

- The Tongan Ministry of Internal Affairs to be contacted regarding advice to be given to sporting teams and other groups travelling to NZ
- Contact database to be developed based on information gathered by district health nurses
- WHO IEC material to be assessed for local use and resources chosen for printing/ production
- Discussion at Epidemic Task Force to include:
 - use of a MR "zero dose" for vaccination of infants 6 -11 months of age
 - consideration of further vaccination and Supplementary Immunisation Activities (SIA)
 - consideration findings of waning immunity amongst samples tested
- Consider a sampling strategy for ongoing laboratory testing.
 - cases in possible new transmission chain or newly affected site, severe or atypical presentations.
 - samples taken for ongoing monitoring of the current outbreak.

Next SITREP due to be issued at: 05/11/2019

Approved by: Dr Siale 'Akau'ola Chief Executive Officer MOH

Date: 29/10/2019

Abbreviations:

- MR Measles rubella vaccine
- IEC Information Education Communication
- TCT Tupou College Toloa
- THS Tonga High School
- TCA Tonga College 'Atele
- RT-PCR Polymerase chain reaction
- VIDRL Victorian Infectious Diseases Reference Laboratory
- MFAT New Zealand Ministry of Foreign Affairs and Trade
- HCW Health care worker
- NFP National Focal Point
- SIA Supplementary Immunisation Activities

Charts

Figure 1

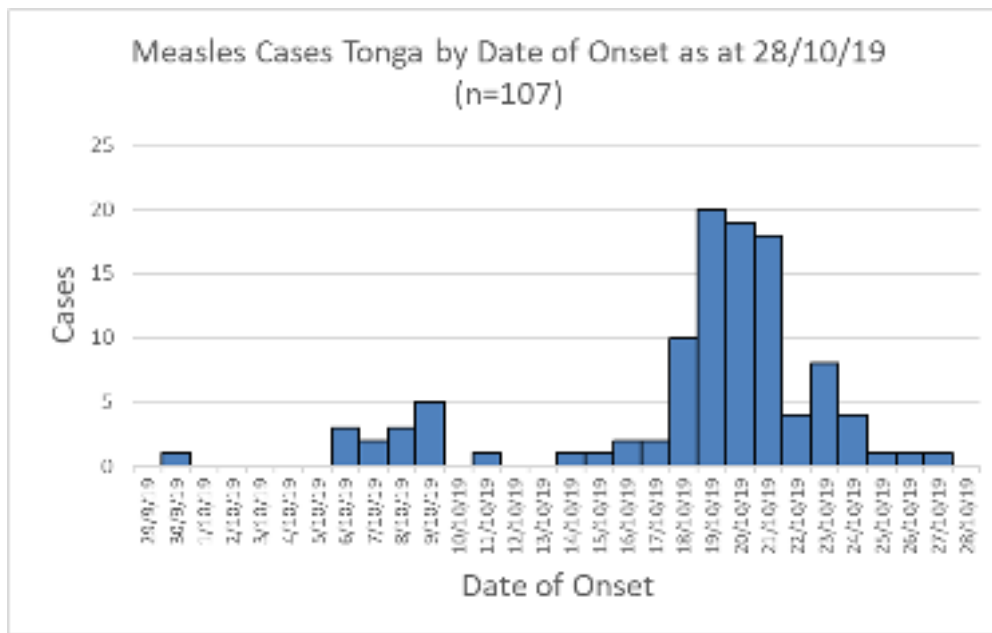


Figure 2

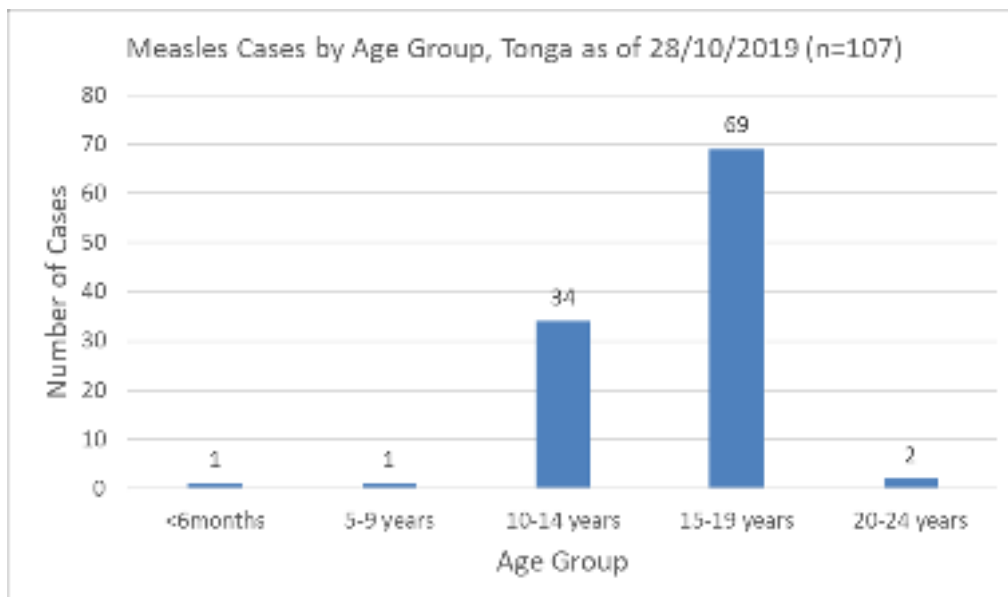


Figure 3

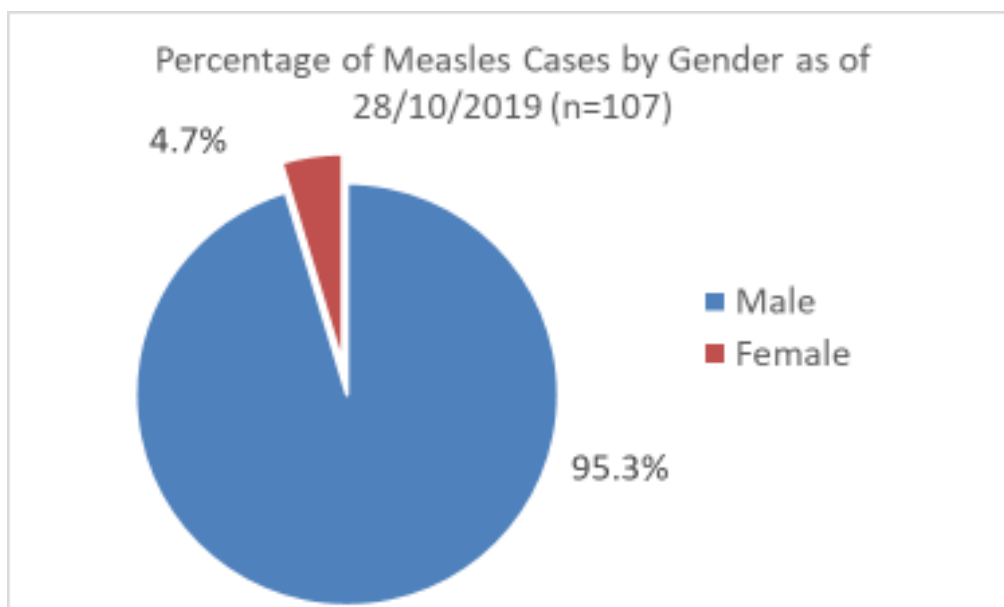


Figure 4

