



**MINISTRY OF HEALTH**  
GOVERNMENT OF TONGA

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## **SITUATION REPORT**

### **Tonga Measles Outbreak 2019**

**SITREP Number: 10**  
**Date of Issue 18/12/2019**

#### **1. Summary of Situation**

##### **Background**

The outbreak of measles in Tonga began in early October 2019, following the return of a team of Tongan rugby players from New Zealand. The index case developed measles while in New Zealand. Subsequently, a further 12 players developed laboratory-confirmed measles after returning to Tonga. The early outbreak involved mainly teenagers from schools on Tongatapu and Vava'u Islands. All 70 villages on Tongatapu Island have reported cases. Small numbers of cases have been identified on the Islands of 'Eua and Niuatoputapu. Since the initial two waves of the outbreak, cases are now being seen widely in other age groups.

An inter-disciplinary Ministry of Health Epidemic Task Force meets weekly to advise on management of the outbreak. In addition to routine outbreak response activities, a time-limited vaccination program targeting secondary school students and 6-11 months infants has been completed and vaccination efforts are now being directed at other target groups including the 10-24-year-old that were missed within the school campaign.

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

#### **2. Current Situation**

During the past week, 14 new measles cases were reported in Tonga, including 10 cases from the main Island of Tonga tapu and 4 cases from Vava'u. Majority (9) of the cases are males and 5 are females. Nine cases were 10-24 years old age and 4 were below 1 year old.

As of 15 December 2019, 564 confirmed or suspected cases of measles have been identified in Tonga. The majority 505 (90%) cases in total have occurred on Tongatapu. Cases have been reported to be mild with 12 hospitalizations with no deaths. The majority of the cases have been managed in home isolation. Given that the duration of illness is typically less than 2 weeks, it is estimated that at least 94% of the 564 reported measles cases will have already recovered from their illnesses

Figure 1 (below) shows the epidemic curve for the current outbreak in Tonga. Most of cases (blue) were reported from the Island of Tongatapu.

Figure 2 demonstrates the breakdown of cases by sex. Consistent with early transmission through male boarding schools, most cases have been among males, with the proportion of cases among females increasing as the outbreak progressed. A total of 87 cases have occurred in children aged less than 5 years, while cases among adolescents and young people continue to form the majority of the cases in this outbreak, with 445 (79%) cases occurring in people aged 10 to 24 years (Table 1 and Figure 3).

### **Key events/ issues since last SITREP**

- Vaccination efforts continue to target groups at greatest risk of measles infection, as well as those at greatest risk of severe illness, including:
  - Extended family contacts of suspected and confirmed cases
  - Adolescents and young adults aged 10 to 24 years, not already picked up in the school program
  - Travellers aged 6 months to 24 years without documented evidence of 2 doses of measles-containing vaccine
- The mass vaccination campaign targeting 10-24-year-old age group not picked up during the school campaign begins on 17 December 2019
- The total number of vaccinations administered, as of 13/12/2019 is 18,431:
  - Tongatapu: 10,890
  - Vava'u: 3,782
  - Ha'apai: 1,500
  - 'Eua: 1,561
  - Niuatoputapu: 453
  - Niuafo'ou: 245
- School-based vaccination program and 'Zero dose' for infants aged 6 to 11 months have been completed on all Islands
- Primary and secondary schools are already closed for the end of school year holidays
- 11 of 19 cases whose swab samples were sent to Victorian Infectious Disease Reference Laboratory (VIDRL) on 22 November 2019 tested positive by PCR. These include 7 cases less than 12 months old.
- Additional stocks of PPE including N95 masks and hand gel are expected to arrive from WHO in coming weeks
- A two-person USCDC team is working with Tonga MOH and WHO to better understand the underlying reasons for the measles outbreak
- A risk communication officer from the Secretariat of the Pacific Community (SPC) supported Tonga on risk communication. The officer conducted a survey of the public to assess awareness and understanding of the situation with a view to improve update of services.
- The draft guideline for public health follow up of cases and contacts, and the guideline for clinical management in Tonga for has been circulated for review
- Government will be officially closed for the year on Friday 20 December 2019. Arrangements have been made to cover services in public health and clinical services with provision for surge capacity

### **Ongoing and planned activities:**

- Weekly ETF meetings to guide response
- Vaccination efforts targeting priority groups
- Contact tracing and post-exposure vaccination of extended family contacts of cases as part of intensive case follow up
- Enhanced surveillance activities, including completion of minimal case report form (CRF) by outpatient clinic staff
- Complete verification of measles immunisation records for cases, with a focus on immunisation records for cases aged less than 10 years and provide a summary of MCV immunization coverage status
- Work with representatives of churches, village and town officers and other organisations to postpone mass gatherings wherever possible
- Ensure collection of additional samples as outbreak appears to have a downward trend and discuss with VIDRL on timely turnaround time
- Finalize the measles outbreak response plan for Tonga
- Finalize the guideline for public health follow up of cases and contacts and the guideline for clinical management for Tonga

**Next SITREP due to be issued at: 25/12/2019**

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

**Date:** 18/12/2019

Charts  
Figure 1

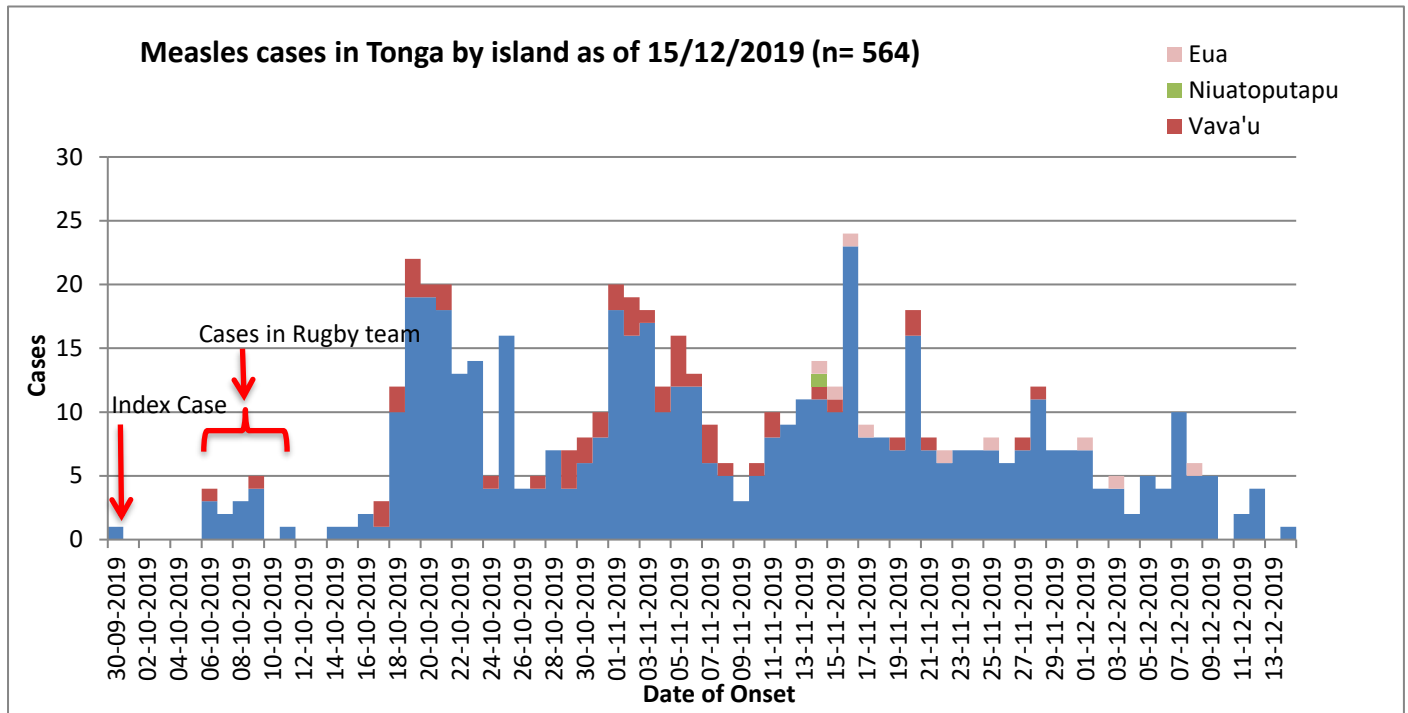
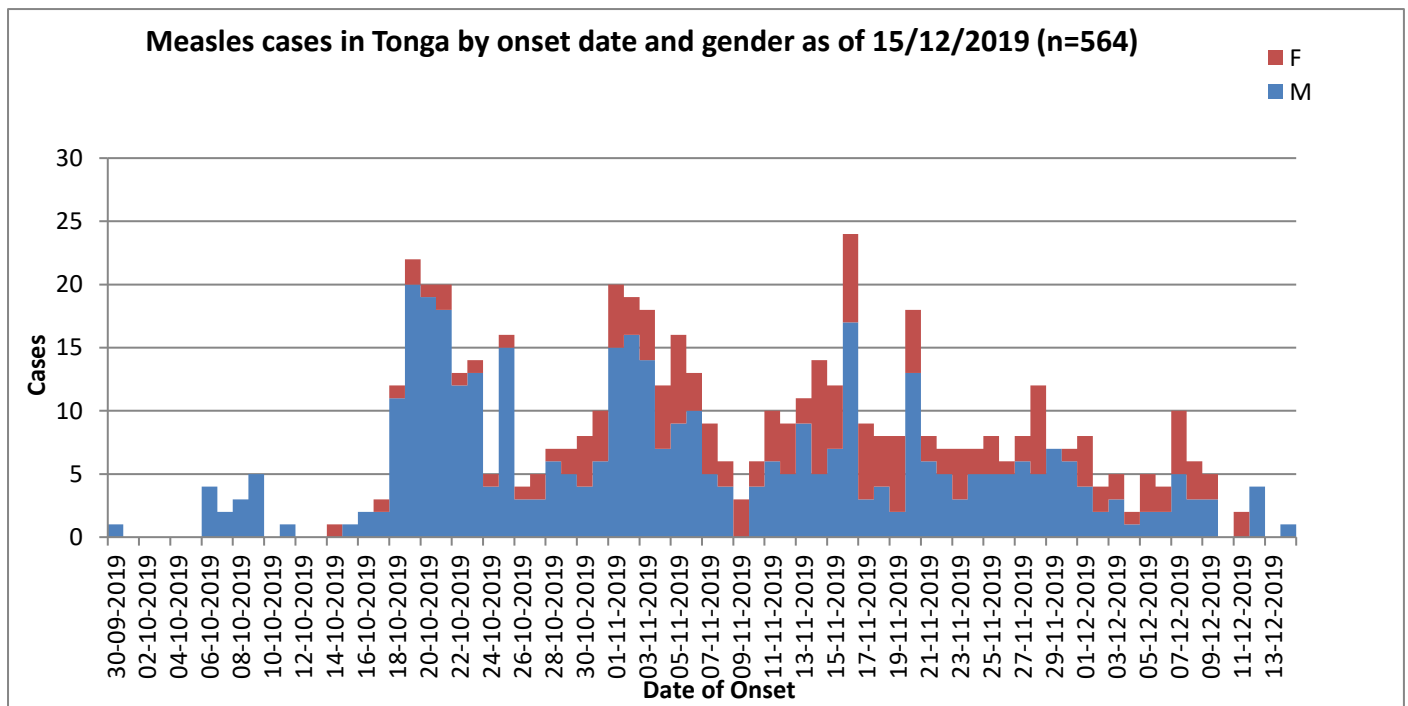


Figure 2



**Table 1: Age distribution of cases in measles outbreak, Tonga, as of 15 December 2019**

Age	Male	Female	Total
Less than 6 months	15	18	33
6 to 11 months	17	19	36
1 to 4 years	10	8	18
5 to 9 years	14	6	20
10 to 14 years	111	19	130
15 to 19 years	197	57	254
20 to 24 years	28	33	61
25 to 29 years	4	3	7
30 years and over	2	3	5
Total	398	166	564

**Figure 3: Age distribution of cases by age group and gender in measles outbreak, Tonga 2019**

