

Early Warning | Performance Indicators

100% 100%

Total number of reporting locations

Total reports submitted

Total missing reports

Completeness

Timeliness

Alert | Active alerts

Total number of IBS* alerts 100% verified

Total number of EBS** alerts 0% verified

Notes on alerts:

* Indicator-based surveillance (IBS) alerts are based on 9 reported syndromes (see Annex 1 for case definitions and alert thresholds).

** Event-based surveillance (EBS) alerts are based on immediate reporting of infectious, chemical and environmental hazards that pose a potential risk to public health.

For more details and to manage the alerts, login to Tonga EWARS

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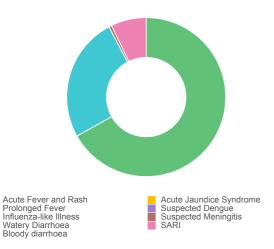
A. Indicator-based Surveillance

B. Annexes

A. Indicator-based surveillance

Summary

Figure 1a | Proportional morbidity by syndrome (W6)



This pie chart represents the proportional breakdown of the reportable syndromes under surveillance. These represented 6% of total morbidity in W6.

Figure 1b | Proportional IBS alerts by syndrome (W6)

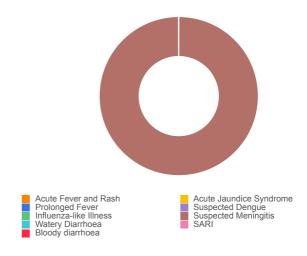


Table 1a | Weekly and cumulative number of cases by syndrome

Syndrome	W6		Cumulative 2018	
	# cases	% morb. ¹	# cases	% morb. ¹
Acute Fever and Rash	0	0.0%	0	0.0%
Watery Diarrhoea	46	25.4%	193	23.2%
Influenza-like Illness	121	66.9%	558	67.1%
Prolonged Fever	0	0.0%	7	0.8%
Dengue-like illness	0	0.0%	0	0.0%
Bloody diarrhoea	0	0.0%	2	0.2%
Suspected meningitis	1	0.6%	1	0.1%
Acute jaundice syndrome	0	0.0%	1	0.1%
Severe acute respiratory infection (SARI)	13	7.2%	69	8.3%
Total consultations	181	100%	831	100%

 $^{^{\}rm 1}$ Proportional morbidity (expressed as % of total consultations)

Table 1c | Surveillance performance indicators by Island (W6)

Location	Reporting	Reporting		Performance	
	# sentinel sites	# reports received	Comp. ³	Time. ⁴	
'Eua	1	1	100%	100%	
Ha'apai	1	1	100%	100%	
Tongatapu	8	8	100%	100%	
Vava'u	1	1	100%	100%	

³ Completeness of reporting

300

Table 1b | Alert performance indicators by type

Syndrome	me W6		Cumulative 2018	
	# alerts	% verif. ²	# alerts	% verif. ²
Acute Fever and Rash	0	0%	0	0%
Watery Diarrhoea	0	0%	5	100%
Influenza-like Illness	0	0%	1	100%
Prolonged Fever	0	0%	0	0%
Dengue-like illness	0	0%	0	0%
Bloody diarrhoea	0	0%	0	0%
Suspected meningitis	1	0%	1	0%
Acute jaundice syndrome	0	0%	0	0%
Severe acute respiratory infection (SARI)	0	0%	0	0%
Event-based surveillance	0	0%	0	0%
Total alerts	0	0%	0	0%

² Proportion of alerts that have been verified

Table 1d | Alert performance indicators by Island

Syndrome	W6		Cumulative 2018	
	# alerts	% verif. ²	# alerts	% verif. ²
'Eua	0	0%	6	100%
Ha'apai	0	0%	8	100%
Tongatapu	1	100%	103	2800%
Vava'u	0	0%	31	0%

National trends by syndrome

Figure 2a | Acute Watery Diarrhoea and Bloody diarrhoea

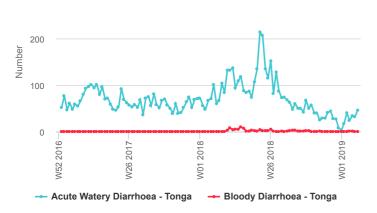
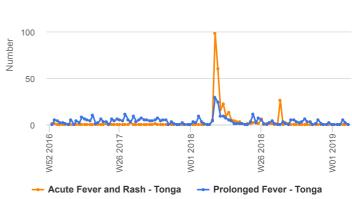


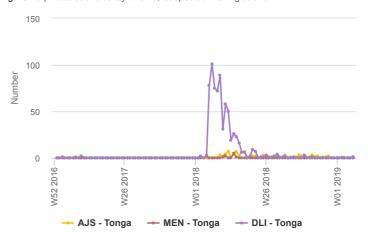
Figure 2b | Acute Fever and Rash (AFR) and Prolonged Fever

150



⁴ Timeliness of reporting

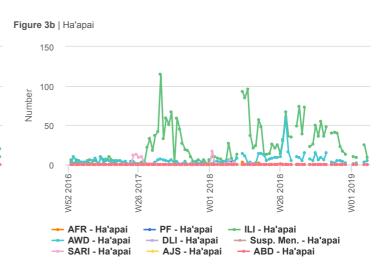




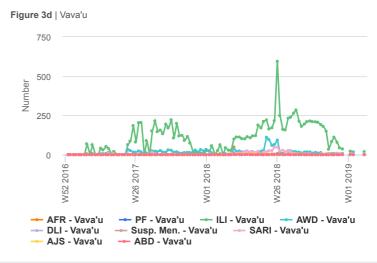
All cause trends by Island

Figure 3c | Tongatapu

Figure 3a | 'Eua 30 20 Number 10 0 W01 2018-W52 2016 W26 2018 W01 2019-W26 2017 → ILI - 'Eua → AW 'Eua → SARI - 'Eua → AFR - 'Eua → DLI - 'Eua PF - 'Eua - AWD - 'Eua --- Susp. Men. - 'Eua AJS - 'Eua ABD - 'Eua



600 400 Number 200 0 W01 2018 -W01 2019-W52 2016 W26 2017 W26 2018 - AFR - Tongatapu --- PF - Tongatapu – ILI - Tongatapu AWD - Tongatapu
Susp. Men. - Tongatapu ⊢ DLI - Tongatapu u — SARI - Tongatapu AJS - Tongatapu - ABD - Tongatapu



Analysis by syndrome

Acute Fever and Rash

Table | Number of cases by Island

Island	AFR
'Eua	0
Ha'apai	0
Tongatapu	0
Vava'u	0

Figure | Number of cases by Island (W6 2019)

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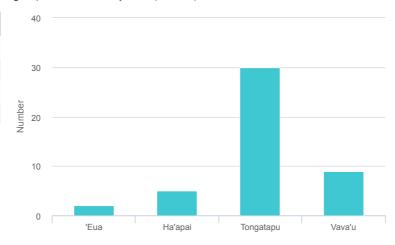
'Eua Ha'apai Tongatapu Vava'u

Acute Watery Diarrhoea

Table | Number of cases by Island

Island	AWD
'Eua	2
Ha'apai	5
Tongatapu	30
Vava'u	9

Figure | Number of cases by Island (W6 2019)

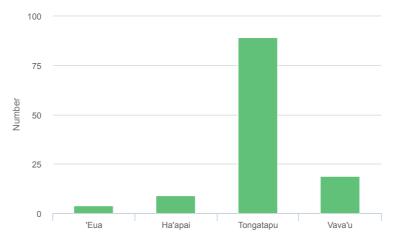


Influenza-like Illness

Table | Number of cases by Island

Island	ILI
'Eua	4
Ha'apai	9
Tongatapu	89
Vava'u	19

Figure | Number of cases by Island (W6 2019)



Prolonged Feve				
Table Number of c	ases by Island	Figure Number of cases by Island (W6 2019)		
Island	PF			
'Eua	0			
Ha'apai	0			
Tongatapu	0	Te e		
Vava'u	0	O ————————————————————————————————————		
		'Eua Ha'apai Tongatapu Vava'u		
D				
Dengue-like illn	ess			
Table Number of c	Figure Number of cases by Island (W6 2019)			
Island	DLI			
'Eua	0			
Ha'apai	0			
Tongatapu	0			
Vava'u	0	Number o ———————————————————————————————————		
		Z 'Eua Ha'apai Tongatapu Vava'u		
Bloody Diarrhoe	ea			
Table Number of cases by Island Figure Number of cases by Island (W6 2019)				
Island	BD			
'Eua	0			
Ha'apai	0			
Tongatapu	0	<u></u>		
Vava'u	0	Number o		

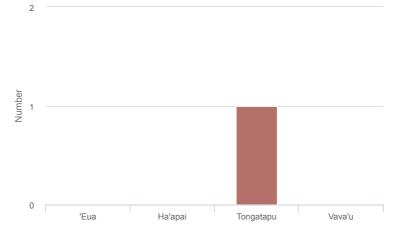
'Eua Ha'apai Tongatapu Vava'u

Suspected meningiti

Table | Number of cases by Island

Island	AWD
'Eua	0
Ha'apai	0
Tongatapu	1
Vava'u	0

Figure | Number of cases by Island (W6 2019)

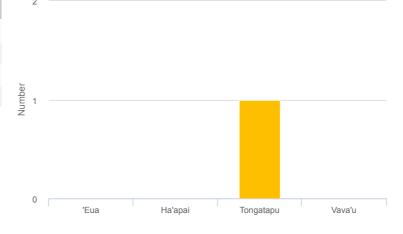


Acute Jaundice Syndrome

Table | Number of cases by Island

Island	MEN
'Eua	0
Ha'apai	0
Tongatapu	0
Vava'u	0

Figure | Number of cases by Island (W6 2019)

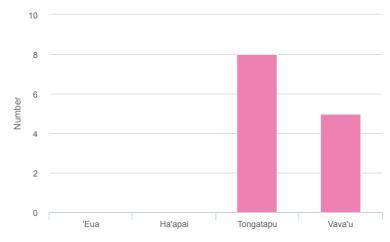


Severe acute respiratory infection (SARI)

Table | Number of cases by Island

Island	SARI
'Eua	0
Ha'apai	0
Tongatapu	8
Vava'u	5

Figure | Number of cases by Island (W6 2019)



B. Annexes

Annex 1 | Case Definitions

Syndrome	Case Definition	Alert Threshold
Acute Fever and Rash	Fever plus rash	1 case
Prolonged fever	Fever for 3 days or more	Twice the average number of cases seen in the previous 2 weeks
Influenza-like illness	Fever plus cough or sore throat	Twice the average number of cases seen in the previous 2 weeks
Watery diarrhoea	3 or more loose or watery stools in 24 hours (non-bloody)	Twice the average number of cases seen in the previous 2 weeks
Bloody diarrhoea	Any episode of acute bloody diarrhea	3 cases in one location in 1 week or twice the average number of cases seen in the previous 2 weeks
Acute jaundice syndrome	Jaundice (yellow eyes or dark urine), and severe illness with or without fever	3 cases
Dengue-like illness	Fever for at least 2 days, plus <u>at least two</u> of the following: i. Nausea or vomiting; ii. Muscle or joint pain; iii. Severe headache or pain behind the eyes; iv. Rash; v. Bleeding	Twice the average number of cases seen in the previous 3 weeks
Suspected meningitis	Sudden onset of fever, plus <u>one or more</u> of the following: i. Severe headache; ii. Neck stiffness; iii. Altered consciousness; iv. Petechial/purpural rash	1 case
Severe acute respiratory infection (SARI)	Influenza-like illness (ILI) and hospitalisation ${f or}$, if at a Health Centre, ILI and referral to main hospital	Twice the average number of cases seen in the previous 2 weeks

Data Sources

EWARS Sentinel Reporting Sites

Contact Information

Ministry of Health Nuku'alofa, Tonga Telephone: #23200 Ministry of Health Nuku'alofa, Tonga Email: Telephone:



Tonga EWARS

has been deployed since Feb 2018 in response to Tropical Cyclone Gita. It is supporting Tonga MoH in enhancing syndromic surveillance to its 11 sentinel sites using mobile technology.

http://to.ewars.ws/login

