



Early Warning | Performance Indicators

11

Total number of reporting locations

11

Total reports submitted

0

Total missing reports

100%

Completeness

91%

Timeliness



Alert | Active alerts

1

Total number of IBS* alerts
100% verified

0

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](#)

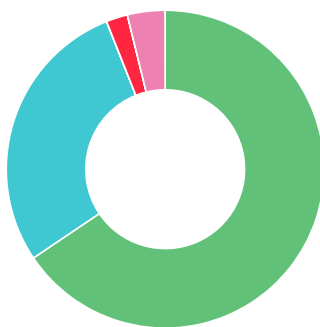
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A. Indicator-based surveillance

Summary

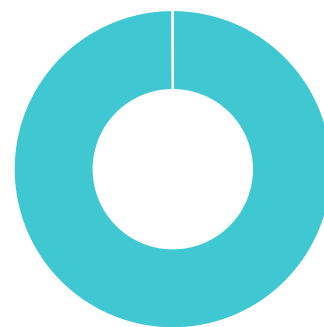
Figure 1a | Proportional morbidity by syndrome (W10)



- Acute Fever and Rash
- Acute Jaundice Syndrome
- Prolonged Fever
- Suspected Dengue
- Influenza-like Illness
- Suspected Meningitis
- Watery Diarrhoea
- SARI
- Bloody diarrhoea

This pie chart represents the proportional breakdown of the reportable syndromes under surveillance. These represented 5% of total morbidity in W10.

Figure 1b | Proportional IBS alerts by syndrome (W10)



- Acute Fever and Rash
- Acute Jaundice Syndrome
- Prolonged Fever
- Suspected Dengue
- Influenza-like Illness
- Suspected Meningitis
- Watery Diarrhoea
- SARI
- Bloody diarrhoea

Statistical tables

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

Syndrome	W10		Cumulative 2018	
	# cases	% morb. ¹	# cases	% morb. ¹
Acute Fever and Rash	0	0.0%	0	0.0%
Watery Diarrhoea	52	28.4%	447	26.5%
Influenza-like Illness	120	65.6%	1,098	65.0%
Prolonged Fever	0	0.0%	11	0.7%
Dengue-like illness	0	0.0%	0	0.0%
Bloody diarrhoea	4	2.2%	9	0.5%
Suspected meningitis	0	0.0%	1	0.1%
Acute jaundice syndrome	0	0.0%	5	0.3%
Severe acute respiratory infection (SARI)	7	3.8%	117	6.9%
Total consultations	183	100%	1,688	100%

¹ Proportional morbidity (expressed as % of total consultations)

Table 1b | Alert performance indicators by type

Syndrome	W10		Cumulative 2018	
	# alerts	% verif. ²	# alerts	% verif. ²
Acute Fever and Rash	0	0%	0	0%
Watery Diarrhoea	1	100%	7	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	0	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 1c | Surveillance performance indicators by Island (W10)

Location	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%	88%
Vava'u	1	1	100%	100%

³ Completeness of reporting

⁴ Timeliness of reporting

Table 1d | Alert performance indicators by Island

Syndrome	W10		Cumulative 2018	
	# alerts	% verif. ²	# alerts	% verif. ²
'Eua	0	0%	6	100%
Ha'apai	0	0%	8	100%
Tongatapu	1	100%	105	3000%
Vava'u	0	0%	31	0%

National trends by syndrome

Figure 2a | Acute Watery Diarrhoea and Bloody diarrhoea

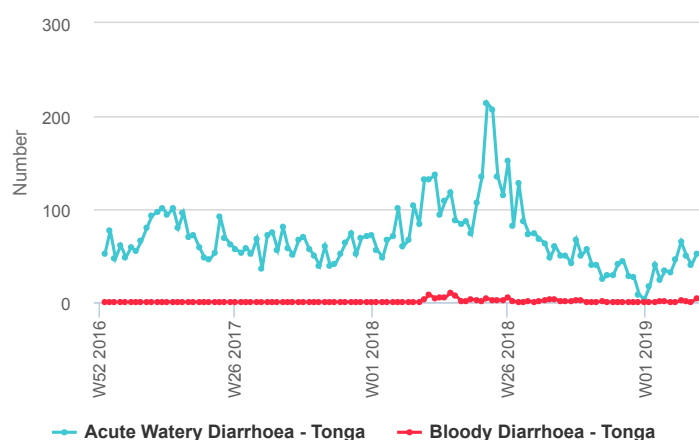


Figure 2b | Acute Fever and Rash (AFR) and Prolonged Fever

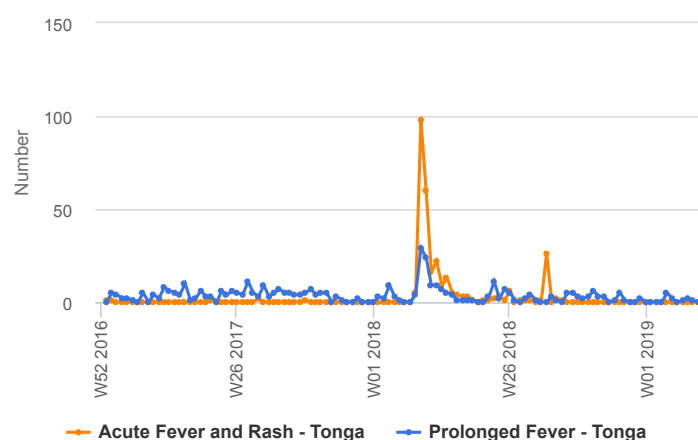


Figure 2c | Influenza-like Illness and SARI

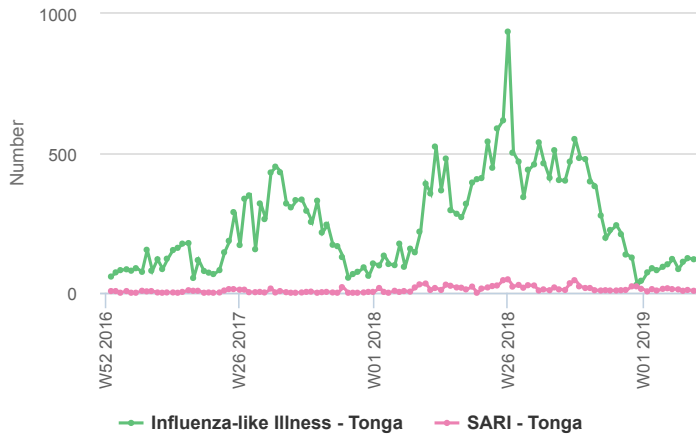
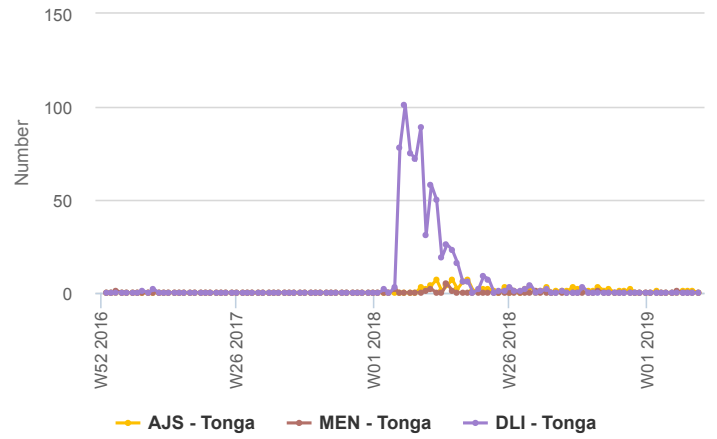


Figure 2d | Acute Jaundice Syndrome, Suspected Meningitis and DLI



All cause trends by Island

Figure 3a | 'Eua

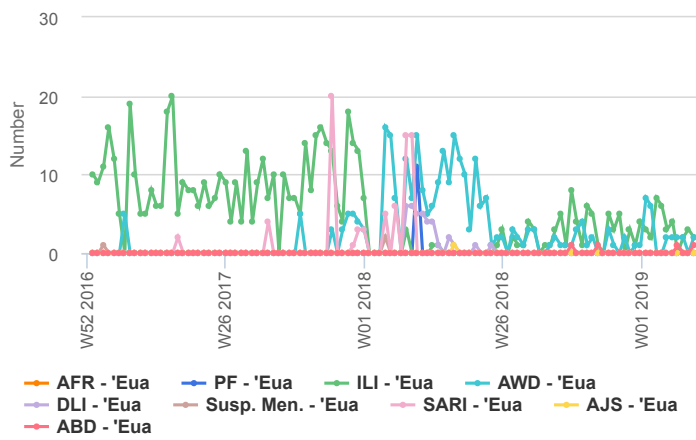


Figure 3b | Ha'apai

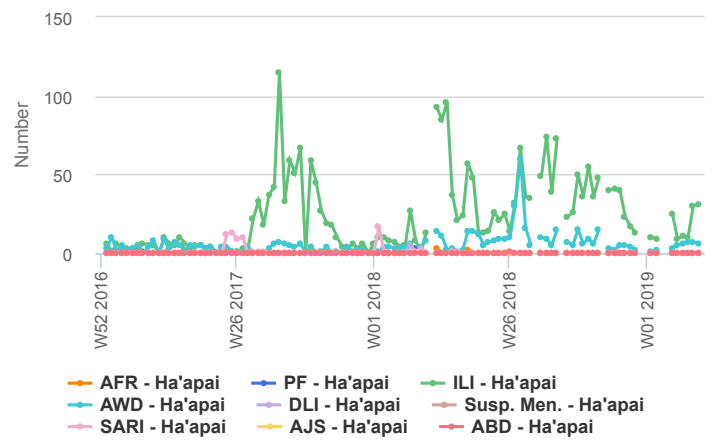


Figure 3c | Tongatapu

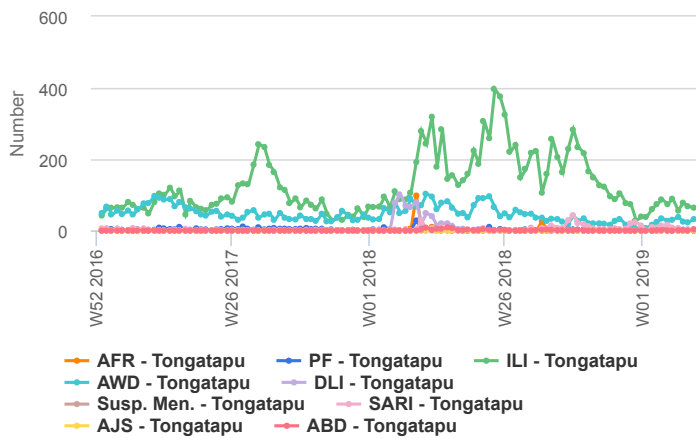
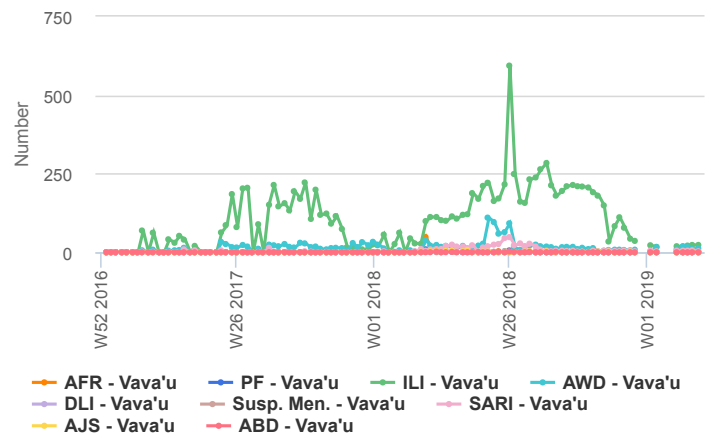


Figure 3d | Vava'u



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 (W10 2019)

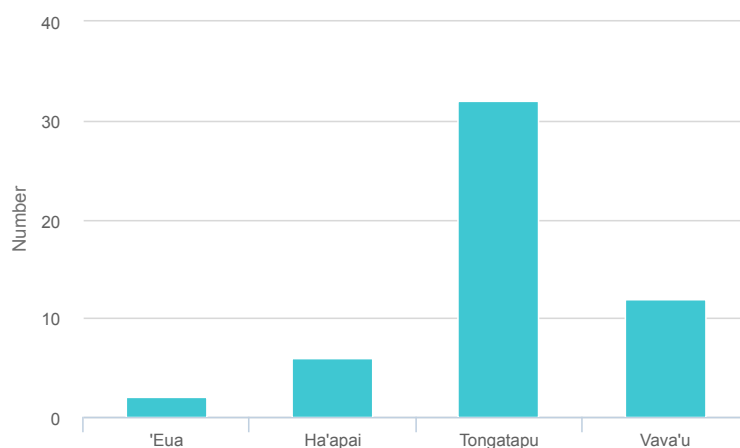


Acute Watery Diarrhoea

Table | Number of cases by Island

Island	AWD
'Eua	2
Ha'apai	6
Tongatapu	32
Vava'u	12

Figure | Number of cases by Island (W10 2019)



Influenza-like Illness

Table | Number of cases by Island

Island	ILI
'Eua	2
Ha'apai	31
Tongatapu	64
Vava'u	23

Figure | Number of cases by Island (W10 2019)

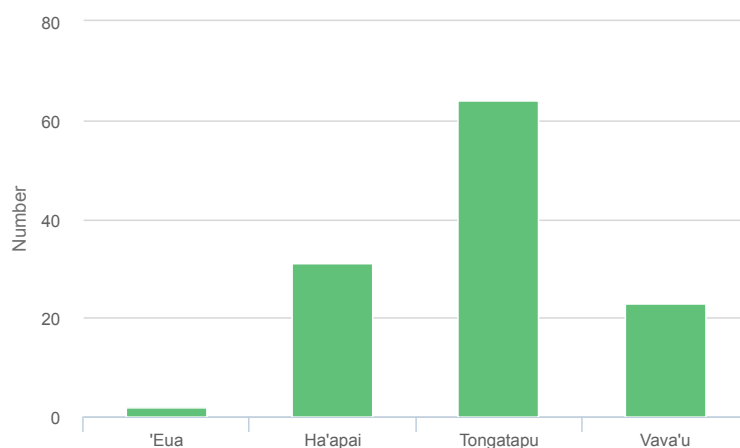
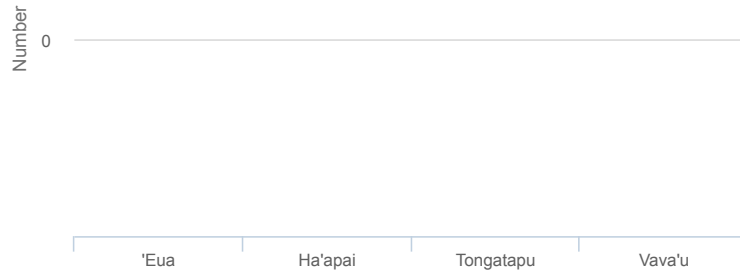


Table | Number of cases by Island

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

Figure | Number of cases by Island (W10 2019)

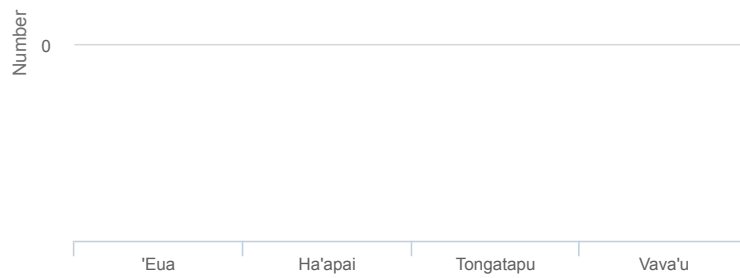


Dengue-like illness

Table | Number of cases by Island

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

Figure | Number of cases by Island (W10 2019)



Bloody Diarrhoea

Table | Number of cases by Island

Island	BD
'Eua	1
Ha'apai	0
Tongatapu	3
Vava'u	0

Figure | Number of cases by Island (W10 2019)

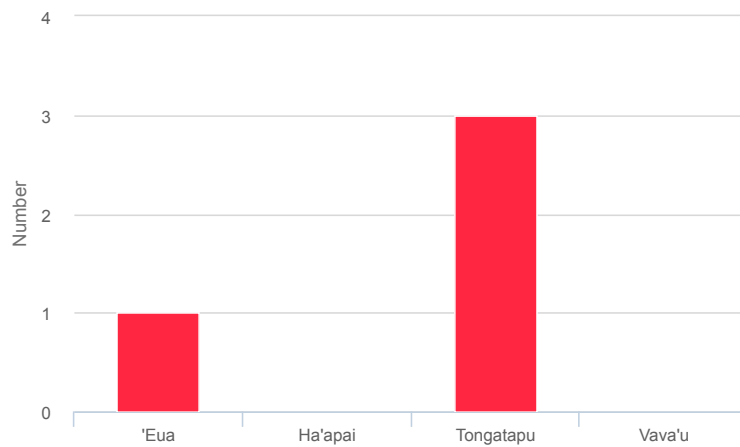


Table | Number of cases by Island

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

Figure | Number of cases by Island (W10 2019)

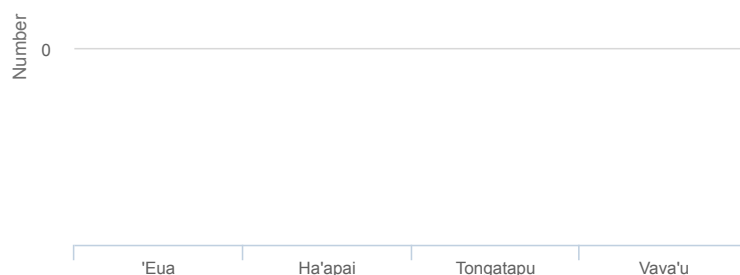


Acute Jaundice Syndrome

Table | Number of cases by Island

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

Figure | Number of cases by Island (W10 2019)

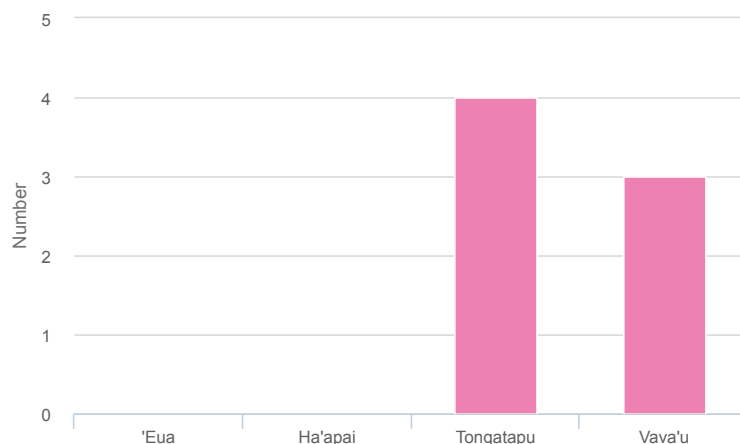


Severe acute respiratory infection (SARI)

Table | Number of cases by Island

Island	SARI
'Eua	0
Ha'apai	0
Tongatapu	4
Vava'u	3

Figure | Number of cases by Island (W10 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 at least two 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 one or more of the following: i. Severe headache; ii. Neck stiffness; iii. Altered consciousness; iv. Petechial/purpurral rash	1 case
Severe acute respiratory infection (SARI)	Influenza-like illness (ILI) and hospitalisation 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>