

Date of report: 07/29/2014 (Tuesday) for cases presenting on: 07/28/2014 (Monday)

Summary

Key findings

- Ten (90.9%) sites reported on Monday, July 28. One sentinel site did not have the surveillance form completed for Monday, July 28 due to closure.
- Of the 10 reporting sentinel sites, 5 (50.0%) reported syndrome cases.
- 23 (5.4%) of the total 425 encounters were reported as syndrome cases.
- 6 (75.0%) of the 8 syndromes were reported.
- 4 (50.0%) of the 8 syndromes reached their threshold:
 - 1 case of acute fever and rash; 19y old male resident of Pohnpei State.
 - 5 cases of watery diarrhea (median age: 20.8 y; range 1y–55 y). Four (80.0%) cases are males. All are residents of Pohnpei State.
 - 14 cases of ILI (median age: 22.03y; range 6 months–66 y). Nine (64.3%) cases are females. All are residents of Pohnpei State.
 - 3 cases of prolonged fever (median age: 10.0y; range 2y–24y). Two (66.7%) cases are females. All are residents of Pohnpei State.
- No additional unusual occurrence reported from the sentinel sites.

Conclusion and recommendations

- Acute fever and rash, watery diarrhea, ILI and prolonged fever syndromes have reached their daily threshold. Case investigation, including specimen collection and testing, has resumed today, Tuesday, July 29.
- One case of fever and jaundice that was reported late on Friday, July 25 has been admitted at the Pohnpei State Hospital and further investigated for hepatitis A and leptospirosis.

Current outbreaks or public health incidents of importance to the games that are occurring in the region and globally

- There are currently measles outbreaks in Kosrae and Pohnpei States, FSM. Please refer to PacNet posting on 25 July 2014 for an update of the outbreak in Pohnpei.
- Guam - a laboratory confirmed case of measles has been detected in a 10-month old child, who has been epidemiologically linked to visitors from Pohnpei, FSM. The case has no travel history.
- Nauru - dengue serotype-3 has been confirmed (RT-PCR) in 11 out of 26 samples sent to Institut Louis Malarde, French Polynesia. The dengue negative samples tested negative for zika virus and chikungunya. There were no new cases reported in Epi week 29.
- American Samoa – an outbreak of Chikungunya has been confirmed – so far more than 100 cases.

Coverage: 11 points of care are included in the enhanced syndromic surveillance system. For the date indicated above, 10 points of care submitted reports.

Overview analysis

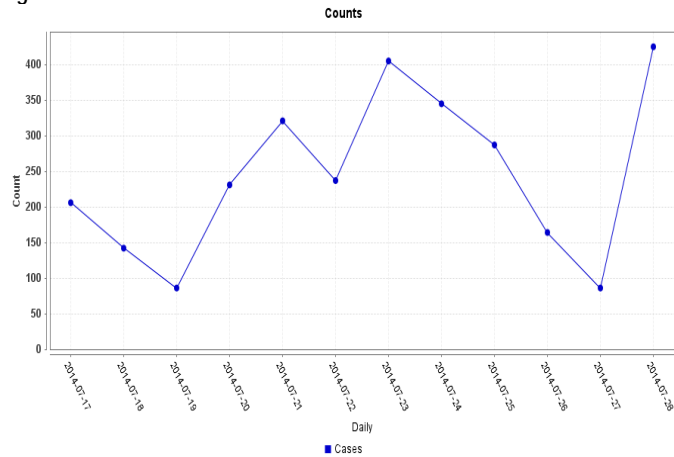
Number of cases observed for the date above										
Point of care	Number Encounter cases*	Number Syndrome cases#	Acute fever and rash	Watery diarrhea	Non-watery diarrhea	Influenza-like illness	Prolonged fever	Fever and jaundice	Heat related illness	Food-borne disease syndrome
Berysin CHC	3	1	0	1	0	0	0	0	0	0
COM Dispensary	1	0	0	0	0	0	0	0	0	0
Genesis Hospital	70	2	0	0	0	2	0	0	0	0
Lukop Dispensary	10	0	0	0	0	0	0	0	0	0
Medpharm HC	16	1	0	0	1	0	0	0	0	0
PICS High School	32	0	0	0	0	0	0	0	0	0
Pohnlangas Dispensary										
Pohnpei CHC	103	12	0	0	1	10	2	0	0	1
Pohnpei State Hospital	177	7	1	4	0	2	1	0	0	0
Sokehs Dispensary	3	0	0	0	0	0	0	0	0	0
Wone Dispensary	10	0	0	0	0	0	0	0	0	0
TOTAL	425	23	1	5	2	14	3	0	0	1
DAILY STATE THRESHOLD	N/a	N/a	1	1	3	4	1	1	2	2
Legend/key:	A cell shaded in red indicates an increase compared to the previous day's report		A cell shaded in green indicates a decrease compared to the previous day's report			A cell shaded in light grey indicates point of care closed		A cell shaded in white indicates no change compared to the previous day's report		
Interpretation:	Reports were collected from 10 sites. Five (50.0%) of the 10 sentinel sites reported syndromes. Acute fever and rash, watery diarrhea, ILI and prolonged fever syndromes have reached their daily state-wide threshold. 3 cases reported more than one syndrome. Note: the apparent increase in red shading includes those sentinel sites that were closed the previous day									

*Encounter cases represent all acute care cases visiting a clinic regardless of whether they have one or more of the eight syndromes e.g., a sprained ankle would be included in the 'encounter case' count

#Syndrome cases represent all acute care cases visiting a clinic who have one or more of the eight syndromes e.g., a sprained ankle would NOT be included in the 'syndrome case' count

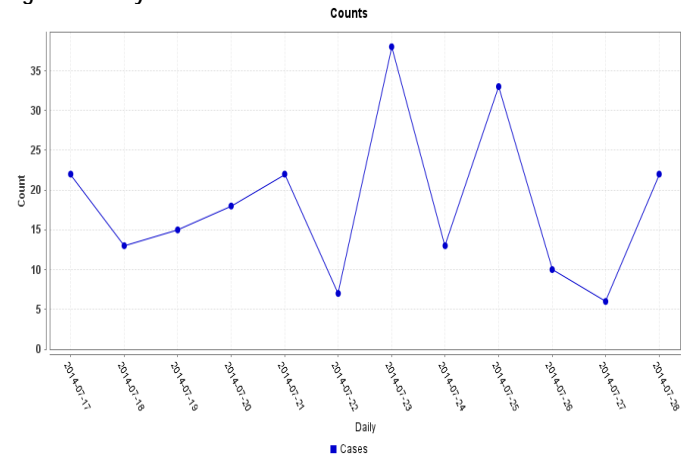
EpiCurves of the number of cases by visit date (Note: case numbers from Monday, July 28 could not be collected from 1 point of care due to closure).

Figure 1: All encounter cases



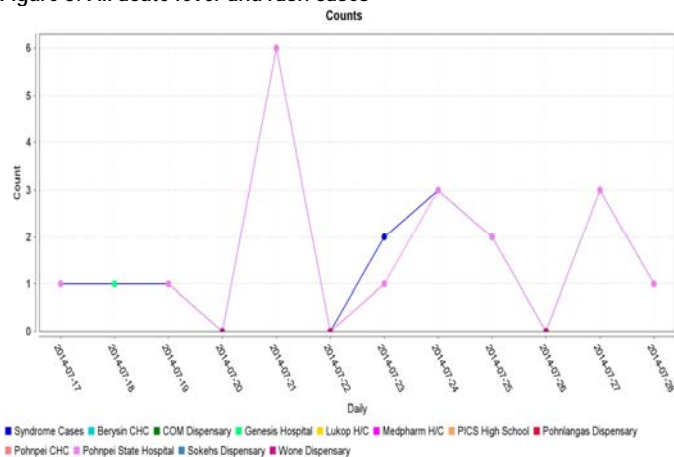
Interpretation: 10 of 11 sites reporting. A large increase from yesterday and the previous 4 day downwards trend to a new maximum of 425 encounters. Some of the increase due to previous day sentinel closures and/or non-reporting.

Figure 2: All syndrome cases



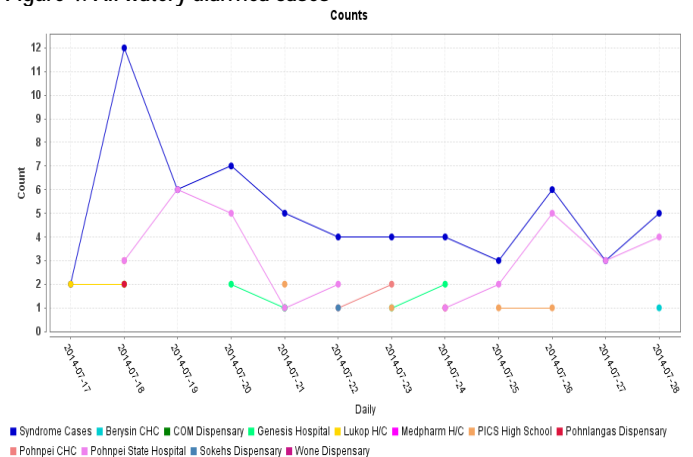
Interpretation: 10 of 11 sites reporting. An increase from yesterday and the previous 2 day downwards trend, to a similar level of one week ago. Some of the increase due to previous day sentinel closures and/or non-reporting.

Figure 3: All acute fever and rash cases



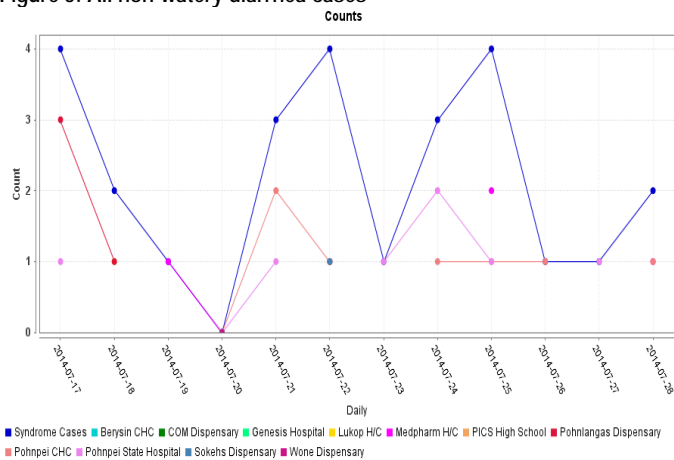
Interpretation: 1 case for the current day. There has been single peak of 6 cases but in last week the trend has been lower at maximum of 3 cases on two non-consecutive days.

Figure 4: All watery diarrhea cases



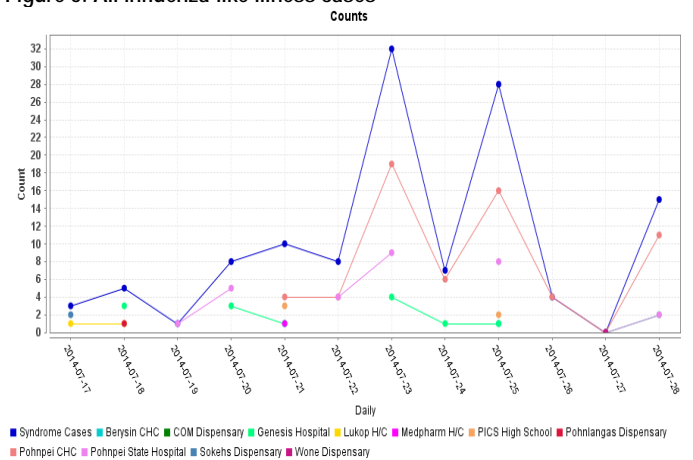
Interpretation: An overall increase of 2 cases from 3 to 5. Overall within the previous weeks general trend of 4 cases, though rising slightly at 6 cases two days previously.

Figure 5: All non-watery diarrhea cases



Interpretation: An increase of 1 case from yesterday. Graph shows decline in the 3 days from peaks of 4 cases.

Figure 6: All influenza-like illness cases



Interpretation: An increase from the weekend to 14 cases (10 of these from Pohnpei CHC) though roughly half the peak amount from earlier last week. The daily trend is more or less stable with the fluctuation over the past week mainly coming from PICS High School.

<p>Figure 7: All prolonged fever cases</p> <p><i>Interpretation:</i> An increase from zero to 3 cases, and has exceeded threshold for follow-up. Low numbers but relevant to monitor for increases over the next few days.</p>	<p>Figure 8: All fever and jaundice cases</p> <p>[Zero cases since commencing Games]</p> <p><i>Interpretation:</i></p>
<p>Figure 9: All heat-related illness cases</p> <p>[Only one case (July 23) since commencing Games]</p> <p><i>Interpretation:</i></p>	<p>Figure 10: All food-borne disease outbreak cases</p> <p>[One case for the 28th – first since commencing Games]</p> <p><i>Interpretation:</i> One case for the 28th – first since commencing Games. Note, this syndrome by definition is meant to involve a clustering of two cases or more – thus, this case is under investigation to ascertain whether it is really a foodborne disease outbreak or misclassification.</p>

Detailed analysis for ongoing investigations - for any syndrome where the set state daily threshold is reached (or was reached in previous days) and, following confirmation of cases, it was decided to undertake an investigation

Syndrome	Acute fever and rash
Point of care (number of cases since July 22)	Pohnpei State Hospital (5 cases) and Pohnlangas Dispensary (1 case)
Dates of investigation	July 23 – ongoing
Description of investigation undertaken	All cases of acute fever and rash reported from the Pohnpei State Hospital are being further investigated by the public health team assigned to investigate measles and arbo-viral infections. Throat swabs and serums collected for further testing for measles and arboviral infections including chikungunya, dengue fever and zika virus. Specimens for arboviral testing will be sent to the Institut Louis Malarde, French Polynesia and throat swabs will be sent to the Hawaii Public Health Laboratory.
Findings of investigation:	
<ul style="list-style-type: none"> Number of cases (since July 22) 	6 (1 case on July 28)
<ul style="list-style-type: none"> Diagnostic methods, number of samples collected, number of samples tested, laboratory involved 	Throat swabs are being collected from cases for measles testing. Blood testing for arboviral infections have been undertaken.
<ul style="list-style-type: none"> Prevailing epidemiological pattern: endemic or epidemic, recent epidemiological history 	There are currently measles outbreaks in Kosrae and Pohnpei States, FSM. Please refer to PacNet posting on 25 July 2014 for an update of the outbreak in Pohnpei state. There are also outbreaks of dengue, zika, and chikungunya in the region.
<ul style="list-style-type: none"> Time/Place/Person/clinical features 	1 case of acute fever and rash; 19y old male resident of Pohnpei State.
Measures taken or considered:	
<ul style="list-style-type: none"> Public health measures (e.g. immunisation strategy, patient and contact management, vector control, water and food safety) 	Please refer to PacNet posting on 25 July 2014 for an update of the Pohnpei situation. Due to the recent heavy rains, vector control activities will be enhanced (at the accommodation and games sites in particular).

Syndrome	Watery diarrhea
Point of care (number of cases since July 17)	Pohnpei State Hospital (29 cases), Genesis Hospital (8 cases), Pohnpei CHC (6 cases), PICS high school (5 cases), Lukop dispensary (2 cases), COM dispensary

	(1 case), Pohnlangas Dispensary (1 case), Berysin CHC (1case)
Dates of investigation	July 18 – ongoing
Description of investigation undertaken	At the Pohnpei State Hospital laboratory, an algorithm for testing stool specimens is operational. All stool specimens in the Pohnpei State Hospital laboratory are being tested to rule out possible enteropathogens such as <i>Vibrio cholerae</i> , <i>Salmonella typhimurium</i> , and <i>Shigella dysenteriae</i> . Also, tests for <i>Giardia lamblia</i> and <i>Entamoeba histolytica</i> are performed. Furthermore, rapid testing for rotavirus, adenovirus, and norovirus is ongoing and results should be available by early next week.
Findings of investigation:	
• <i>Number of cases (since July 17)</i>	53 (5 cases on July 28)
• <i>Diagnostic methods, number of samples collected, number of samples tested, laboratory involved</i>	Stool samples have been taken. One stool sample had visible worm infestation and this also being confirmed by the laboratory. Results are pending and will be available this week.
• <i>Time/Place/Person/clinical features</i>	Median age of 5 cases of watery diarrhea was 20.8years (range 1y–55 y). Four (80.0%) cases are males. All are residents of Pohnpei State.
Measures taken or considered:	
• <i>Public health measures (e.g. immunisation strategy, patient and contact management, vector control, water and food safety)</i>	A public health advisory on diarrhea was created and translated into the local language for dissemination through radio. In addition, awareness on good hygiene techniques, including hand washing, is ongoing through posters and flyers. An incident command system (ICS) is set-up to plan, prepare, and respond to any incidents. The incident command, section and unit chiefs meet daily to discuss progress and address any issues. The Pohnpei EPA is continuing daily environmental assessment, spot inspections, and is working closely with the Public Health Surveillance and Response Committee and the Organising Committee for any remedial action.

Syndrome	Influenza like illness
Point of care (number of cases since July 17)	Pohnpei CHC (60 cases), Pohnpei State Hospital (29 cases), Genesis Hospital (15 cases), Pohnlangas dispensary (2 cases), Sokehs dispensary (2 cases), PICS High School (2 cases), Lukop dispensary (1 case), Medpharm HC (1 case), Berysin CHC (1 case)
Dates of investigation	July 24 – ongoing
Description of investigation undertaken	Case investigation forms for ILI were completed for 12 individuals. 8 of the 12 individuals met the case definition of ILI. Of the 8 cases, 8 (100%) had fever, 7 (87.5%) had cough, 4 (50%) had coryza, and 3 (37.5%) had sore throat. 5 (62.5%) out of the 8 cases were females. Further investigations for the new ILI cases are being undertaken and results will be made available on Wednesday, July 30.
Findings of investigation:	
• <i>Number of cases (since July 17)</i>	113 (14 cases on July 28)
• <i>Diagnostic methods, number of samples collected, number of samples tested, laboratory involved</i>	22 specimens (nasopharyngeal and oral swabs) from individuals who met the ILI case definition (fever and sore throat or cough) were collected for influenza testing. For PCR testing, the specimens will be shipped to the reference laboratory at the Hawaii State Public Health on Wednesday, July 30. The rapid diagnostic test for influenza is available at the Pohnpei State Hospital Laboratory. Henceforth, 2 sets of swabs will be collected for testing through RDT and PCR.
Measures taken or considered:	
• <i>Public health measures (e.g. immunisation strategy, patient and contact management, vector control, water and food safety)</i>	Awareness on good hygiene techniques, including hand washing and cough etiquette, is ongoing through posters and flyers.

Syndrome	Prolonged Fever
Point of care (number of cases since July 20)	Pohnpei CHC (6 cases), Pohnpei State Hospital (3 cases), Pohnlangas dispensary (1 case)**
Dates of investigation	July 24 – ongoing
Description of investigation undertaken	A case report form to investigate dengue fever (and other arboviral infections) has been created for investigation of prolonged fever cases.

	** This case was misreported upon further investigation.
Findings of investigation:	
• <i>Number of cases (since July 20)</i>	9 (3 cases on July 28)
• <i>Diagnostic methods, number of samples collected, number of samples tested, laboratory involved</i>	2 prolonged fever cases reported from Pohnpei CHC were treated for pneumonia-like illness.
Measures taken or considered:	
• <i>Public health measures (e.g. immunisation strategy, patient and contact management, vector control, water and food safety)</i>	A public health advisory on dengue fever and leptospirosis was created and made available through posters and flyers. Travel advisory and prevention messages for dengue fever and leptospirosis are displayed on a monitor at the port of entry at the Pohnpei International Airport.

Syndrome	Non-watery diarrhea
Point of care (number of cases since July 20)	Pohnpei CHC (5 cases), Pohnpei State Hospital (7 cases), Lukop Dispensary (1 case), Pohnlangas dispensary (5 cases), Medpharm (2 cases), and Sokehs Dispensary (2 cases)
Dates of investigation	July 24 – ongoing
Description of investigation undertaken	Case investigation form for shigella and salmonella with food recall history are used to investigate non-watery diarrhea cases.
Findings of investigation:	
• <i>Number of cases (since July 20)</i>	25 (0 case on July28)
• <i>Diagnostic methods, number of samples collected, number of samples tested, laboratory involved</i>	Stool specimens are collected and tested for <i>Vibrio cholerae</i> , <i>Salmonella typhimurium</i> , <i>Shigella dysenteriae</i> , <i>Giardia lamblia</i> , <i>Entamoeba histolytica</i> , rotavirus, adenovirus, and norovirus are ongoing using an algorithm.
Measures taken or considered:	
• <i>Public health measures (e.g. immunisation strategy, patient and contact management, vector control, water and food safety)</i>	A public health advisory on diarrhea was created and translated into the local language for dissemination through radio. In addition, awareness on good hygiene techniques, including hand washing, is ongoing through posters and flyers.

Note, the archive of daily reports can be found at: http://www.spc.int/phs/PPHSN/Surveillance/Mass_gathering.htm