

Date of report: **07/28/2014 (Monday)** for cases presenting on: **07/27/2014 (Sunday)**

### Summary

#### Key findings

- 3 (27.3%) sites reported on Sunday, July 27. The remaining sentinel sites did not have the surveillance forms completed for Sunday, July 27 due to weekend closure.
- Of the 3 reporting sentinel sites, only 1 (33.3%) reported syndrome cases.
- 6 (7.0%) of the total 86 encounters were reported as syndrome cases.
- 3 (37.5%) of the 8 syndromes were reported.
- 2 (25.0%) of the 8 syndromes reached their threshold:
  - 3 cases of watery diarrhea (median age: 15 y; range 8 mo–36 y). All cases were female residents of Pohnpei state.
  - 2 cases of acute fever and rash (median age: 34.5 y; range 24–45 y). All cases were female residents of Pohnpei state.
- No additional unusual occurrence reported from the sentinel sites.

#### Conclusion and recommendations

- Acute fever and rash and watery diarrhea syndromes have reached their daily threshold. Case investigation, including specimen collection and testing, has resumed today, Monday, July 28.

#### 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, 3 points of care submitted reports.

#### Overview analysis

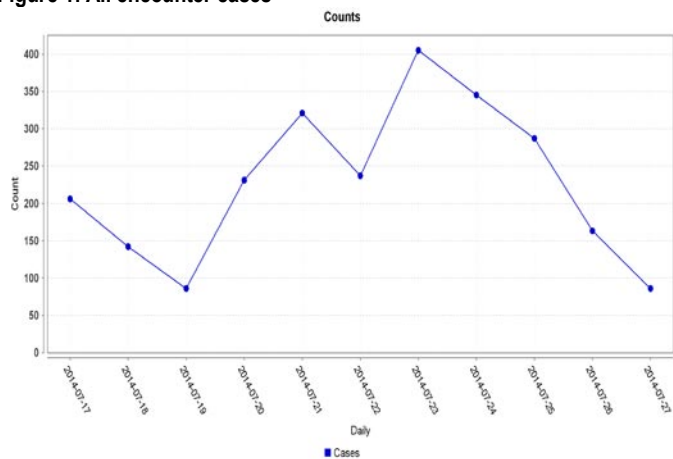
Number of cases observed for the date above										
Point of care	Number Encounter cases*	Number Syndrome cases#	Acute fever and rash	Watery diarrhea	Non-watery diarrhea	Influenza-like illness	Prolonged fever	Fever and jaundice	Heat related illness	Food-borne disease syndrome
Berysin CHC										
COM Dispensary										
Genesis Hospital	22	0	0	0	0	0	0	0	0	0
Lukop Dispensary										
Medpharm HC										
PICS High School	11	0	0	0	0	0	0	0	0	0
Pohnlangas Dispensary										
Pohnpei CHC										
Pohnpei State Hospital	53	6	3	3	1	0	0	0	0	0
Sokehs Dispensary										
Wone Dispensary										
<b>TOTAL</b>	<b>86</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>DAILY STATE THRESHOLD</b>	<b>N/a</b>	<b>N/a</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>
<b>Legend/key:</b>	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			
<b>Interpretation:</b>	Reports were collected from 3 sites. Only 1 (33.3%) of the 3 sentinel sites reported syndromes. Acute fever and rash and watery diarrhea syndromes have reached their daily state-wide threshold.									

\*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

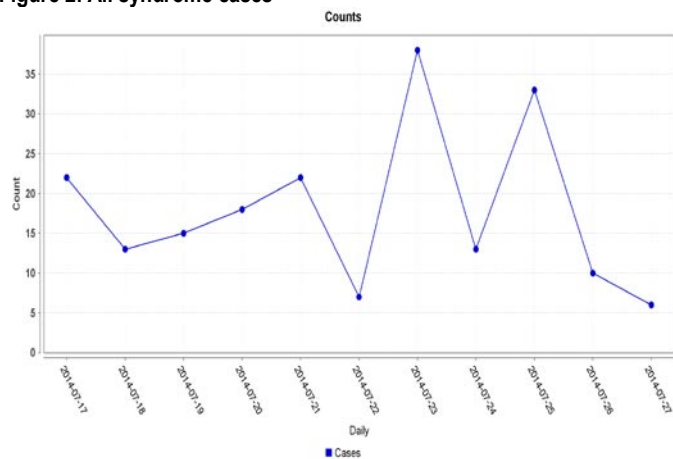
EpiCurves of the number of cases by visit date (Note: case numbers from Sunday, July 27 could not be collected from 8 points of care due to weekend closure).

Figure 1: All encounter cases



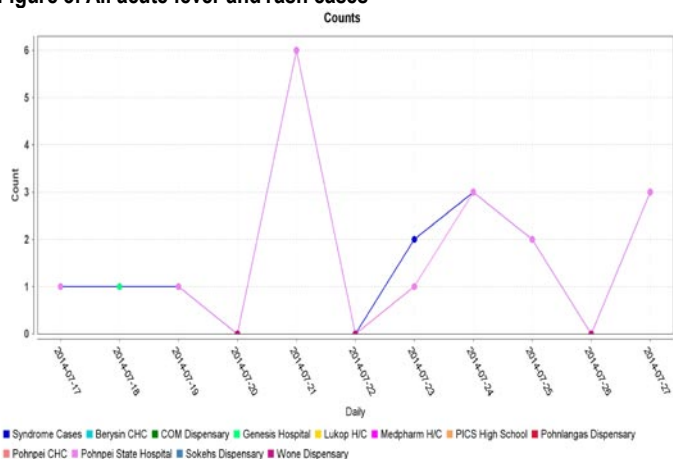
**Interpretation:** A decrease from previous day - note, reports from 8 sites unable to be collected due to weekend closure.

Figure 2: All syndrome cases



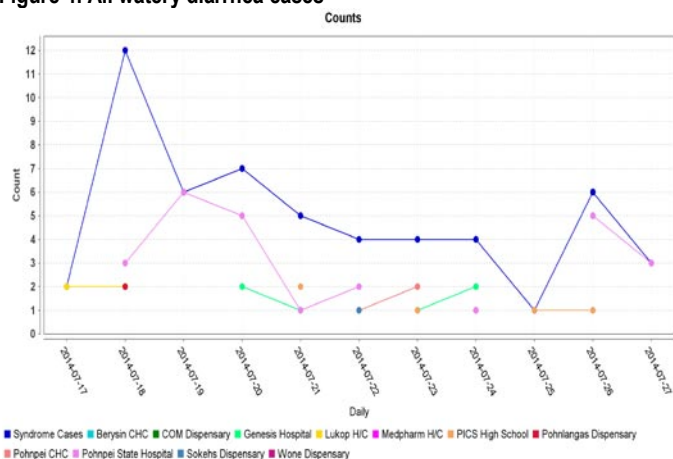
**Interpretation:** A decrease from previous day - note, reports from 8 sites unable to be collected due to weekend closure.

Figure 3: All acute fever and rash cases



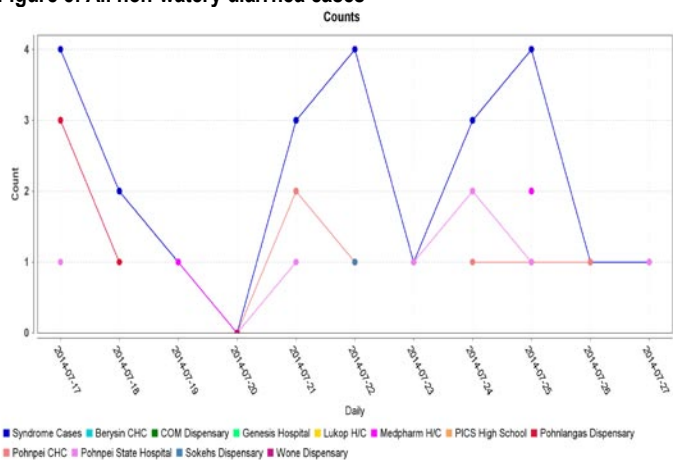
**Interpretation:** No cases for the current day. Graph shows variation from 0 to 6 cases per day over past week, and increased from 0 to 3 cases since previous day (all 3 cases reported to Pohnpei State Hospital).

Figure 4: All watery diarrhea cases



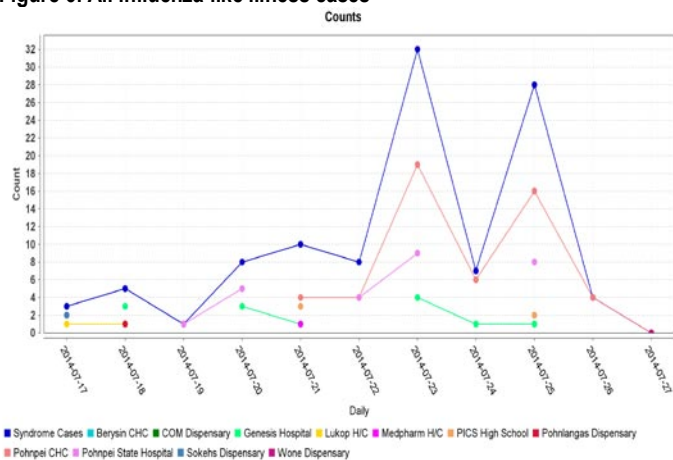
**Interpretation:** A decrease from 6 to 3 cases from previous day - all 3 of these cases reported to Pohnpei State Hospital. Graph shows variation from 1 to 12 cases per day over past week.

Figure 5: All non-watery diarrhea cases



**Interpretation:** Stable at since previous day. Graph shows variation from 0 to 4 cases per day over past week.

Figure 6: All influenza-like illness cases



**Interpretation:** A decrease from 28 to 0 cases since previous day. Graph shows variation from 1 to 32 cases per day over past week. Peaks at 32 cases on July 23, and again on July 25 (28 cases).

<p><b>Figure 7: All prolonged fever cases</b></p> <p><b>Interpretation:</b> No cases for current day. Graph shows variation from 0 to 5 cases per day over past week. Peak at 5 on July 21.</p>	<p><b>Figure 8: All fever and jaundice cases</b></p> <p>[Zero cases since commencing Games]</p> <p><b>Interpretation:</b></p>
<p><b>Figure 9: All heat-related illness cases</b></p> <p>[Only one case (July 23) since commencing Games]</p> <p><b>Interpretation:</b></p>	<p><b>Figure 10: All food-borne disease outbreak cases</b></p> <p>[Zero cases since commencing Games]</p> <p><b>Interpretation:</b></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

<b>Syndrome</b>	Acute fever and rash
<b>Point of care (number of cases since July 22)</b>	Pohnpei State Hospital (4 cases) and Pohnlangas Dispensary (1 case)
<b>Dates of investigation</b>	July 23 – ongoing
<b>Description of investigation undertaken</b>	2 cases of acute fever and rash reported at Pohnpei State Hospital will be further investigated by the public health team assigned to investigate measles and measles-like illness. Case report form with information on demographics, clinical symptoms, exposure history, and measles (MMR or MR) vaccination will be ascertained along with specimen from the two cases. All cases are entered in the measles outbreak line list to link cases and monitor the status of the current outbreak.
<b>Findings of investigation:</b>	
• <i>Number of cases (since July 22)</i>	5 (2 cases on July 27)
• <i>Diagnostic methods, number of samples collected, number of samples tested, laboratory involved</i>	Blood and swabs (NP or oral) will be collected from the cases for measles testing. Testing for arboviral infections will also be considered.
• <i>Prevailing epidemiological pattern: endemic or epidemic, recent epidemiological history</i>	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.
• <i>Time/Place/Person/clinical features</i>	Median age of the 2 cases of acute fever and rash was 34.5 years (range 24-45 y). All cases were females residing in Pohnpei state.
<b>Measures taken or considered:</b>	
• <i>Public health measures (e.g. immunisation strategy, patient and contact management, vector control, water and food safety)</i>	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).

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<b>Syndrome</b>	Watery diarrhea
<b>Point of care (number of cases since July 17)</b>	Pohnpei State Hospital (26 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)
<b>Dates of investigation</b>	July 18 – ongoing
<b>Description of investigation undertaken</b>	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.
<b>Findings of investigation:</b>	
• Number of cases (since July 17)	49 (3 cases on July 27)
• Diagnostic methods, number of samples collected, number of samples tested, laboratory involved	Stool samples were collected and tested using rapid tests for rotavirus, adenovirus, and norovirus. Results are pending and will be available this week.
• Time/Place/Person/clinical features	Median age of the 3 cases of watery diarrhea was 43years (range 1y–51 y). All cases were female residents of Pohnpei state.
<b>Measures taken or considered:</b>	
• Public health measures (e.g. immunisation strategy, patient and contact management, vector control, water and food safety)	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.

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<b>Syndrome</b>	Influenza like illness
<b>Point of care (number of cases since July 17)</b>	Pohnpei CHC (49 cases), Pohnpei State Hospital (27 cases), Genesis Hospital (13 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)
<b>Dates of investigation</b>	July 24 – ongoing
<b>Description of investigation undertaken</b>	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.
<b>Findings of investigation:</b>	
• Number of cases (since July 17)	99 (0 cases on July 27)
• Diagnostic methods, number of samples collected, number of samples tested, laboratory involved	15 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.
<b>Measures taken or considered:</b>	
• Public health measures (e.g. immunisation strategy, patient and contact management, vector control, water and food safety)	Awareness on good hygiene techniques, including hand washing and cough etiquette, is ongoing through posters and flyers.

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<b>Syndrome</b>	Prolonged Fever
<b>Point of care (number of cases since July 20)</b>	Pohnpei CHC (4 cases), Pohnpei State Hospital (2 cases), Pohnlangas dispensary (1 case)**
<b>Dates of investigation</b>	July 24 – ongoing
<b>Description of investigation undertaken</b>	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.
<b>Findings of investigation:</b>	
• Number of cases (since July 20)	6 (0 cases on July 27)
• Diagnostic methods, number of samples collected, number of samples tested, laboratory involved	2 prolonged fever cases reported from Pohnpei CHC were treated for pneumonia-like illness.
<b>Measures taken or considered:</b>	
• Public health measures (e.g. immunisation strategy,	A public health advisory on dengue fever and leptospirosis was created and made

<i>patient and contact management, vector control, water and food safety)</i>	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.
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<b>Syndrome</b>	Non-watery diarrhea
<b>Point of care (number of cases since July 20)</b>	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)
<b>Dates of investigation</b>	July 24 – ongoing
<b>Description of investigation undertaken</b>	Case investigation form for shigella and salmonella with food recall history are used to investigate non-watery diarrhea cases.
<b>Findings of investigation:</b>	
<ul style="list-style-type: none"> <li>• <i>Number of cases (since July 20)</i></li> </ul>	25 (1 case on July27)
<ul style="list-style-type: none"> <li>• <i>Diagnostic methods, number of samples collected, number of samples tested, laboratory involved</i></li> </ul>	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.
<b>Measures taken or considered:</b>	
<ul style="list-style-type: none"> <li>• <i>Public health measures (e.g. immunisation strategy, patient and contact management, vector control, water and food safety)</i></li> </ul>	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](http://www.spc.int/phs/PPHSN/Surveillance/Mass_gathering.htm)