JULY 14th 2012 (Feedback on data as at 13th July 2012)

General comment on reported syndromes:

A/ Evolution of raw number of cases for the 8 selected syndromes, starting one week before the beginning of the FOPA (June 25th) – see attached Charts

Graphs for All sites (all participating clinics in Honiara):

-**Acute Fever & Rash**: 6 case reported yesterday. The general decline in the raw number probably indicates that the rubella outbreak in Honiara is getting under control. Since AFR cases are still reported it is advisable to take some samples to confirm diagnoses for AFR cases (case of dengue?) as it should be done for similar situations, i.e. in the ending phase of any outbreak.

-**Watery Diarrhoea**: 3 case reported yesterday. A single reported case of this syndrome should trigger (i) a follow-up by the surveillance and response teams (observance of case definition) and (ii) further laboratory and epidemiological investigations when clinical presentation is confirmed by the nurse practitioner.

-**Non-Watery Diarrhoea**: 8 cases reported yesterday. The raw number and the percentage of NWD by the total of syndromes (graph D) remains relatively high.

-**Influenza-like-Illness:** 37 cases reported yesterday, the percentage of ILI by the total of syndromes remained high (graph D)
Reports from regional and global surveillance confirm that a new A(H3N2) virus has replaced the A(H1N1)2009 pandemic strain in Australia and possibly in other places of the Southern hemisphere. These reports stress that such a new virus could easily be spreading among the non-immunized population at the occasion of the mass-gathering happening during the Festival.
Laboratory investigation is of the highest importance in this instance. Some Nasopharyngeal have been taken and sent to reference lab for further investigation.

-**Prolonged Fever:** 14 case reported yesterday, of which 12 had positive Malaria Smear test.

-**Acute Fever & Neurological symptoms:** no case reported yesterday
A single reported case of this syndrome should trigger (i) a follow-up by the surveillance and response teams (observance of case definition) and (ii) further laboratory and epidemiological investigations when clinical presentation is confirmed by the nurse practitioner (and malaria test is negative).

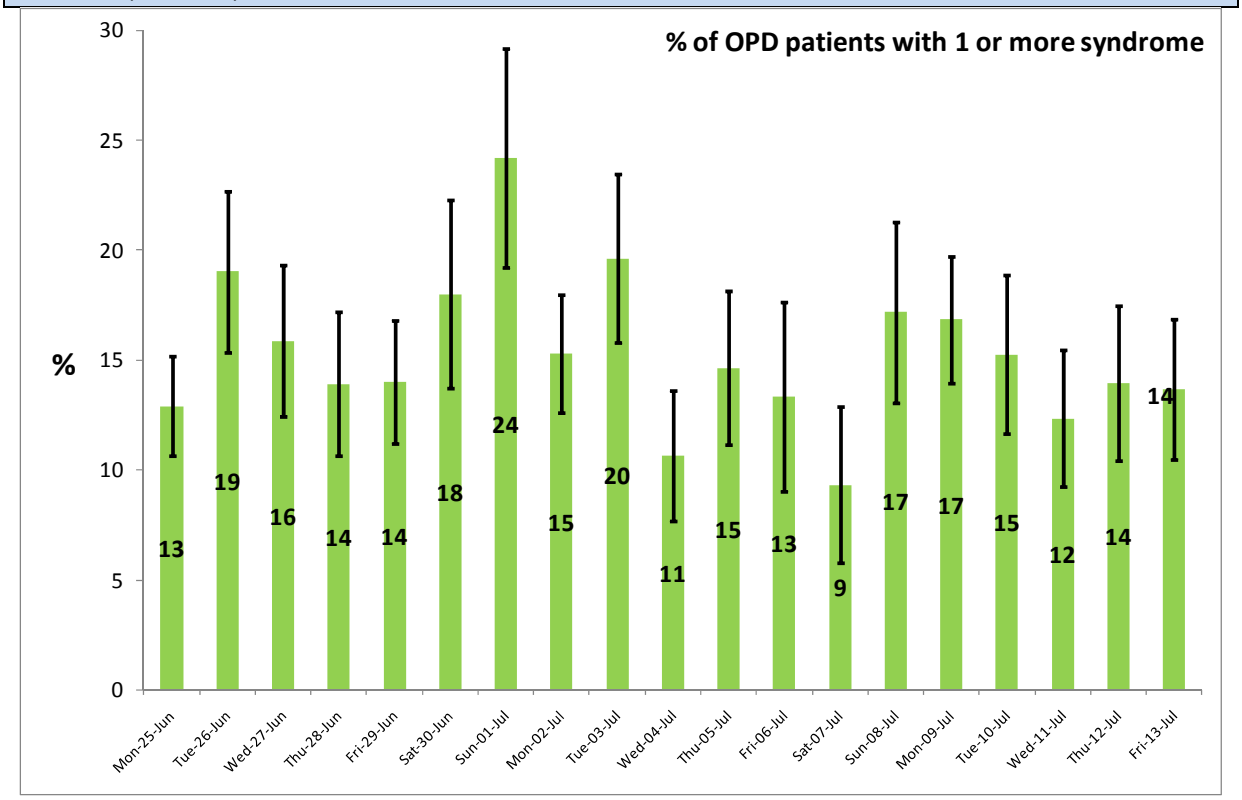
-**Fever & Jaundice:** no case reported yesterday. A single reported case of either of these should trigger (i) a follow-up by the surveillance and response teams (observance of case definition) and (ii) further laboratory and epidemiological investigations when clinical presentation is confirmed by the nurse practitioner.

-**Heat-related-Illness:** no case reported since July 4th.

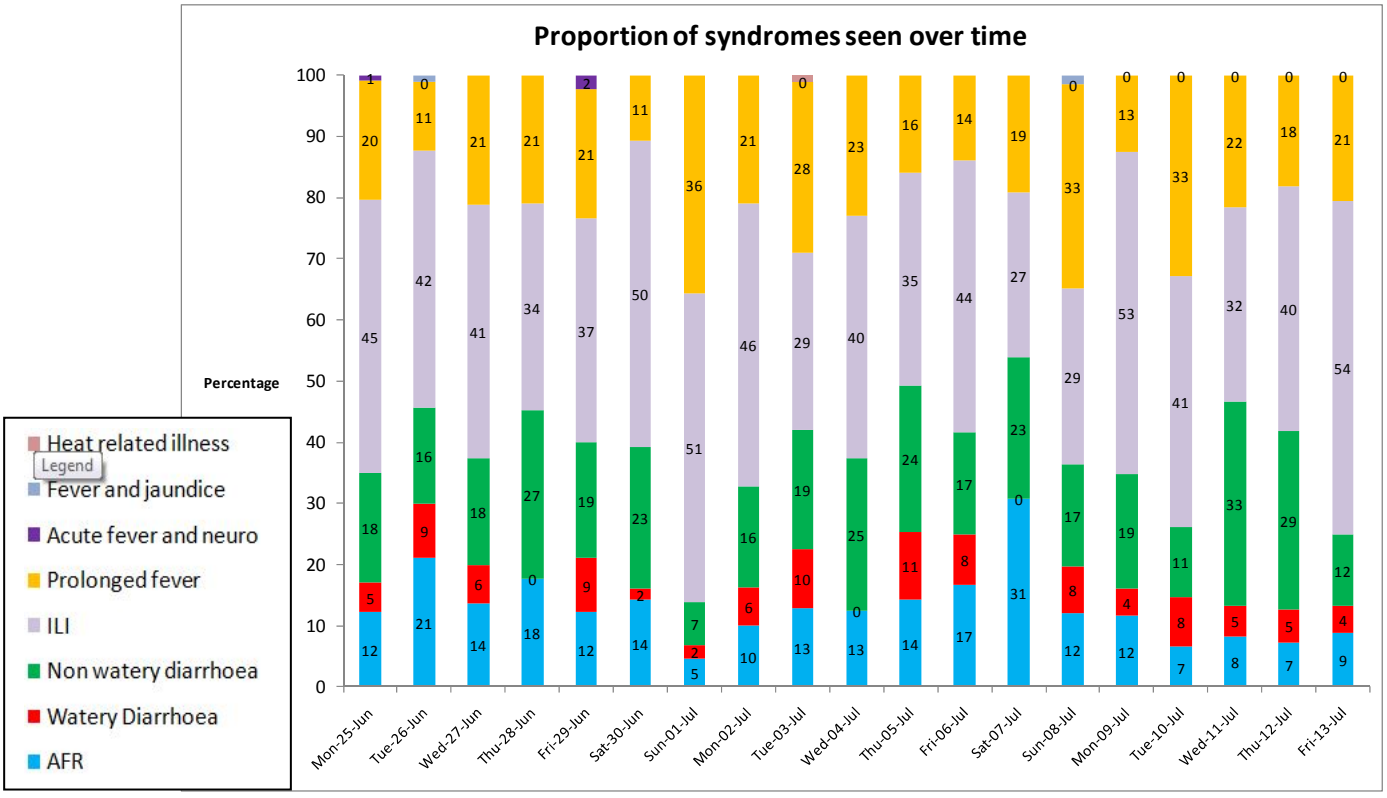
B/ Number of cases by syndrome and by site for **July 13th –** see attached Charts

-13 sites ran OPD clinics yesterday
10 sites provided data and it is entered
3 sites (EMC, King George and Panatina) provided the data but there were zero cases to report

C/ % of OPD patients with at least one of the 8 selected syndromes, starting one week before the beginning of the FOPA (June 25th)



D/ % of each syndrome by the total of all syndromes



This indicator provides us with a proxy of specific morbidity. Of the 8 syndromes under surveillance it shows us the percentage that each syndrome contributes.

What we should expect and when should we react:

1. That ILI and prolonged fever would contribute the highest percentage due to circulating flu virus and malaria being endemic to the Solomon islands
2. Given that there was a recent rubella outbreak we also expect that AFR percentage to be fairly constant, but its contribution should decrease over time as measures have been taken to control the outbreak
3. Small percentage due to heat related illness
4. Extremely low percentage contributed by Fever and jaundice, acute fever and neurological syndromes. A single reported case of either of these should trigger (i) a follow-up by the surveillance and response teams (observance of case definition) and (ii) further laboratory and epidemiological investigations when clinical presentation is confirmed by the nurse practitioner (and malaria test is negative).
5. Small percentage contributed due to watery diarrhoea and non-watery diarrhoea. However a sharp increase in either of these should trigger (i) a follow-up by the surveillance and response teams (observance of case definition) and (ii) further laboratory and epidemiological investigations when clinical presentation is confirmed by the nurse practitioner.

Investigation and response

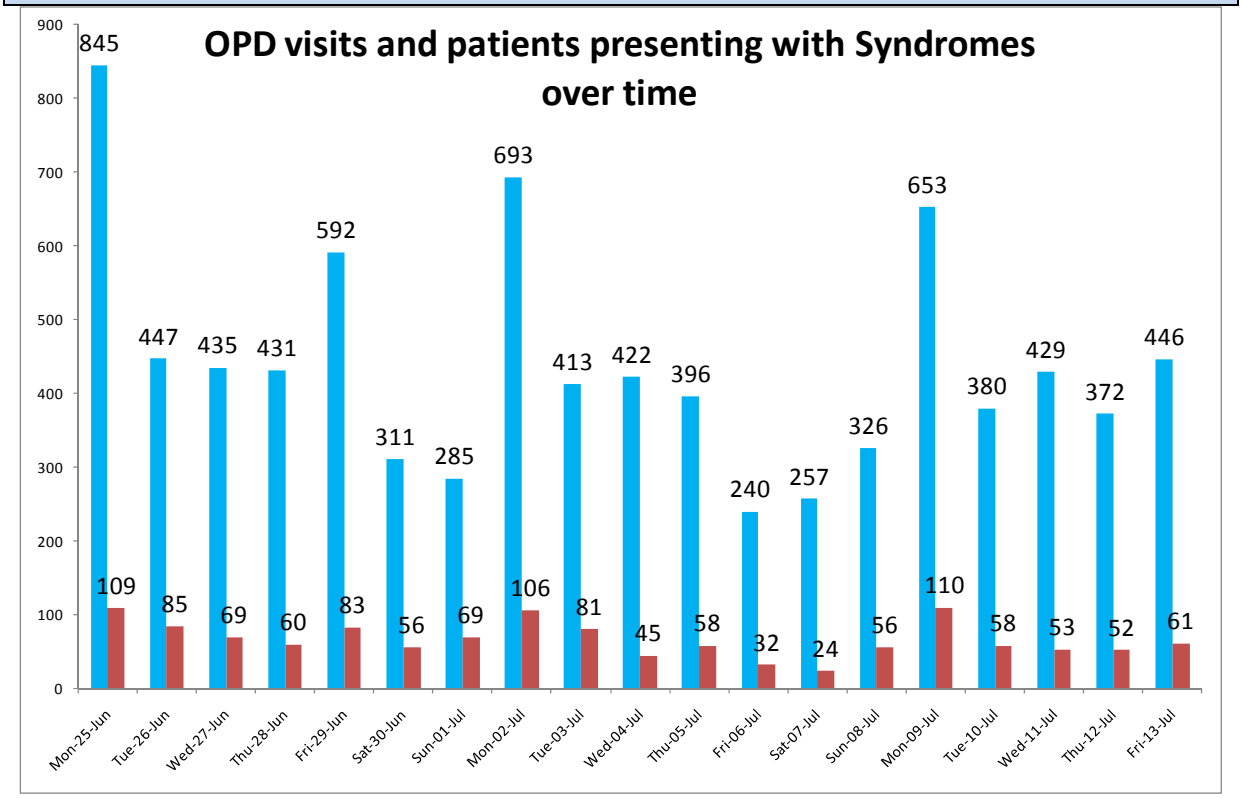
1. The FOPA National Health Sub-committee Response Team has investigated the 2 cases of **Fever and neurological symptoms** that were notified last Monday, 9th of July. Both are now ruled out (see previous daily feedback reports for 11/07 and 12/07). None of these 2 cases met any of the syndromic case definitions and have now been erased from the surveillance database.

2. Laboratory and epidemiological investigations carried out on **diarrhoea** cases (both "watery" and "non-watery") have yielded enlightening and useful information to guide pragmatic curative and public health response measures.

   Stools samples from a Solomon Islands' 56 year old female presenting with a watery diarrhoea, notified by Rove clinic on the 11th of July, allowed for the diagnosis of multiple intestinal infestation by the NRH's Central laboratory, i.e.: *Trichuris trichura* (parasite, "whip worm"), Amoeba (parasite), and red blood cells on microscopic examination; and *Shigella spp* (bacteria) on stools culture. Both cholera and rotavirus have been ruled out. These results are illustrative of both the water and sanitation problems prevailing in some areas of Honiara, and of the related risk of waterborne and fecal-oral transmitted diseases to which some particular urban communities of low socio-economic status are exposed to. The diagnosis shigellosis is already of substantial help for individual patients' treatment, and will be even more after the laboratory services would have completed their investigations on the serogroup in cause and its antibiotic sensitivity. If needed, specimens will be sent to the referral L3 LabNet lab in Queensland. Laboratory and epidemiological investigations are still carried out on **diarrhoea** cases (both "watery" and "non-watery") to ascertain diagnoses and gather more scientific and field-based evidences. Epidemiological and clinical features reviewed so far seem to indicate that there could be an etiological link between the currently notified cases of diarrhoea and the outbreak that occurred in Honiara and Western Province late last year, as reported at the time to the Regional Syndromic Surveillance System – though the causal agent remained unknown at that time.
3. The isolated case of **Fever and jaundice** notified last Sunday (8/07) by Rove clinic has been investigated by the Health Sub-committee's Response Team. The patient was a 22 year old male from Solomon Islands who had been referred to NRH where he had been treated for pneumonia on an outpatient basis. After investigation, this case has been classified as a case of pneumonia due to *Streptococcus pneumoniae*, treated with procaine penicillin and discharged.
4. Two female suspected cases of dengue from the delegation of Niue, notified as **Heat related illness** syndromes by Panatina clinic and admitted to the NRH's isolation ward on the 3rd of July are still under investigation. Both patients have been since discharged in good condition. Initial laboratory investigations conducted on only one of them yielded negative results for dengue RDT (NS1, IgM and IgG). Additional blood samples were to be collected today on both patients for further lab

examination, and epidemiological investigations were to be completed to assess the risk of viral importation into Solomon Islands.

E/ OPD visits and patients presenting with Syndromes overtime (starting one week before the beginning of the FOPA)



Conclusion/recommendations:
3 cases of Watery Diarrhoea, at the diabetes center, Naha, and Mbokona should be investigated.

Field and laboratory investigations of **Watery** and **Non-watery Diarrhoea** cases have yielded useful and illustrative results to guide pragmatic curative and public health response measures. *Shigella spp* has been isolated from the culture of stools samples of one adult Solomon Islands' patient. Parasites have also been identified by microscopic examination. These results are illustrative of both the water and sanitation problems prevailing in some areas of Honiara, and of the related risk of waterborne and fecal-oral transmitted diseases to which some particular urban communities of low socio-economic status are exposed to. Altogether the numbers of **diarrhoea** cases remain relatively high, largely among young children under 5 years old.

Laboratory samples are being collected for cases of **Acute Fever & Neurological symptoms** and **Prolonged Fever** (for malaria smear-negative) to document diagnoses in view of confirming the decline of the rubella outbreak and to watch out for the emergence of dengue in Solomon Islands. Nasopharyngeal swabs are also collected from **ILI** patients for influenza surveillance.

The case of **Acute Fever & Jaundice** notified on the 8th of July has been classified as a case of pneumonia due to *Streptococcus pneumoniae*, after investigation. The 2 cases of **Acute Fever & Neurological symptoms** notified on Monday 9th of July have now been investigated and ruled out. Epidemiological and laboratory investigations of two female suspected cases of dengue from the delegation of Niue, notified as **Heat related illness** syndromes on the 3rd of July are still on-going. Initial laboratory investigations conducted on only one of them yielded negative results for dengue RDT (NS1, IgM and IgG). Additional blood samples were to be collected today on both patients for further lab examination; epidemiological investigations were to be completed as well to assess the risk of viral importation into Solomon Islands.