

Email reporting for the Hospital-based Active Surveillance System in the Pacific Islands — Update on current trial

A regional Pacific Hospital-based Active Surveillance (HBAS) system was established in 1997 by WHO under the PPHSN framework as part of the Global Polio Eradication Initiative. The objectives of the system were to prove that the Pacific was free of polio virus and serve as the basis of certification as such; and to monitor the maintenance of polio-free status. Also, the potential that an acute flaccid paralysis surveillance (AFP) system platform could play for integrated EPI surveillance was recognised, and the conditions of “suspected measles” and neonatal tetanus (NT) were included from the start. The HBAS system has now grown to incorporate some 58 hospitals in 20 Pacific Island countries and areas and over 200 pediatric clinicians. In 2001, surveillance was expanded from “suspected measles” to acute fever and rash (AFR) to better identify cases of measles and other diseases like rubella and dengue.¹

The HBAS system relies on the hospital-based pediatric clinicians reporting monthly on a standard surveillance form to their HBAS Hospital Coordinator as to whether or not they have seen any cases of AFP, AFR or NT. This information is then forwarded by the Hospital Coordinator to the country’s HBAS National Coordinator, who collates reports from all HBAS reporting sites within the country. National reports are submitted to WHO on a monthly to quarterly basis.

The HBAS system should be comprehensive for detecting all AFP cases in the Pacific, but at present it functions primarily as a sentinel system for AFR illnesses. This is because not all AFR cases would be expected to present to a hospital or health-care setting. However, hospital-based surveillance for AFR is considered sensitive enough to detect and alert when disease outbreaks occur. This was tested with the recent outbreaks of measles (Marshall Islands 2003) and rubella (Tonga 2002, Samoa and Tokelau 2003) in the Pacific, but it appears that the HBAS system played no role in the early notification of these outbreaks. Encouragingly, a review of monthly reports from these countries in the lead-up to and during these outbreaks noted that AFR cases were being detected. However, notification to National Coordinators and WHO was delayed in part due to the use of a paper-based system (mail and fax) for report submission and only a quarterly reporting requirement.

In an effort to enhance the HBAS system reporting timeliness and role in outbreak alerts, participants at the 2nd PPHSN Regional EpiNet Workshop in Noumea (June 2004) requested WHO to review the current paper/fax-based reporting methods and trial email-based reporting with greater integration with PPHSN and PacNet. This trial commenced in October 2004 by WHO in collaboration with SPC. It involves WHO sending an automated email to the HBAS National Coordinator on the first of every month. National Coordinators are requested to advise if cases of AFP, AFR and NT have or have not been detected at any of their country’s HBAS reporting sites within the preceding month, and if so how many. Replies via email are requested to reach WHO by the seventh of the month.

WHO and SPC collate and review country email reports and will provide a summary to all countries in the Pacific via PacNet-Restricted by the tenth of the month. This is intended to act as an early alert for Pacific countries of emerging events (e.g. measles or rubella outbreak) and to allow individual countries to enhance their surveillance activities accordingly. The PacNet-Restricted posting contains the following information:

- countries detecting cases of AFP or AFR

¹ O’Leary, M. A method for active surveillance of selected communicable diseases. Pacific Health Dialog, Vol. 7. No. 2, 2000

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- number of cases of detected syndromes
- additional information regarding laboratory confirmation (if available)
- countries that responded to the email for that month and detected no cases.

For simplicity, the trial will initially target countries with only one HBAS reporting site and will run for six months before being reviewed, with the results being shared with both National Coordinators and EpiNet focal persons. The Commonwealth of Northern Mariana Islands, Cook Islands, Tuvalu and Palau have kindly agreed to participate, and initial results and feedback are positive. It is hoped that if the email trial is successful, this method of report submittal and feedback could be expanded in the future to include all National Coordinators in the Pacific islands.

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