

# A COMPUTERISED ALERT SYSTEM FOR NOTIFICATION OF COMMUNICABLE DISEASES

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For disease surveillance, an efficient, functional reporting system is essential to provide accurate and appropriate information for action on priority communicable diseases. A qualitative study (using in-depth semi-structured interviews) carried out among health staff engaged in notifiable disease surveillance activities in Jaffna District (Sri Lanka) revealed that incompleteness and delay in reporting are the main causes for the poor surveillance data reporting. Computerising the surveillance process is found to be essential to improve the timeliness of reporting and making various sources involve in reporting.

This present work is intended to propose a conceptual design for computerising the notification part of the surveillance process of infectious diseases. This electronic system for notification can be established at locations so that personnel from various sectors shall involve in notification. It is suggested to gather information as per *H544 form* for the notification. With this in mind entities such as *Patient, Practitioner, Medical institution, Notifiable disease, Laboratory, MOH area, PHI range, GO division, DS/AGA division, Public* were identified, and association among these entities were developed through the relations *Treatment, Lab reporting, Inform, etc.* This system shall be introduced to all the medical practitioners (indigenous and western). On entering necessary details to the system, the notification has to be sent electronically to the respective public health authorities (MOH and PHI). Simultaneous surveillance alert message to the respective PHI's mobile phone should also be delivered.

Since this notification is based on provisional diagnosis, it would be necessary to incorporate laboratory reporting subsequently via *laboratory report form*. In addition, public health workers and general public need a separate form called *Notification card–Public*. This public notification should be facilitated through a public network system such as the Internet as a convenient and more viable way of notification.

**Keywords:** Communicable disease surveillance; Electronic reporting system; Computerised alert system