

ABSTRACT

Evaluation of a post earthquake internally displaced persons surveillance system (IDPSS)—Haiti, 2010

A Sprecher¹, C El Bcheraoui¹, M Willis¹, E Jentes¹, R Tohme¹, J Walldorf¹, Beckett G¹, C Dubray¹, S Wiktor¹, S Blank¹, and R Magloire²

¹Centers for Disease Control and Prevention, Atlanta GA, USA; and ²Ministère de la Santé Publique et de la Population, Port-au-Prince, Haiti
 E-mail: asprecher@cdc.gov

Objective

We evaluated internally displaced persons surveillance system (IDPSS) to determine its suitability for use during a complex humanitarian emergency.

Introduction

On January 12, 2010, a magnitude 7.0 earthquake struck Haiti, killing > 230 000 persons and placing an estimated 1.5 million into internally displaced persons (IDP) camps. IDPs are at increased risk for communicable diseases resulting from unhealthy living conditions. The Haitian Ministry of Public Health and Population (MSPP) established the IDPSS to detect outbreaks and characterize disease trends within these camps.

IDPSS gathers data on IDPs seen in clinics run by non-governmental agencies (NGOs). Physician tally sheets are totaled and sent to the MSPP by E-mail or on paper for those without internet connection. Each Monday, analyses of surveillance data through the preceding week are distributed. Reports, guidelines, and forms are sent to MSPP partners and NGOs through the system's Google group (Mountain View, CA, USA), an internet-based discussion forum.

Methods

We assessed the suitability of IDPSS by examining its simplicity, flexibility, acceptability, and timeliness because these criteria were considered the most relevant in an emergency context. We interviewed NGO surveillance managers and Centers for Disease Control and Prevention and MSPP staff, and analyzed IDPSS clinic report submission data for February 18 (date of inception)–April 22. We also reviewed materials available on the system's Google group internet site (reporting forms, case definitions, guidelines, and weekly reports).

Results

IDPSS' use of aggregate data, stratification into only two age groups, ages <5 and ≥5 years, and use of case definitions

that allowed NGOs to make a reporting determination at the point of care, make the system simple. The flexibility of the system was demonstrated by a transition to a new reporting form, and changes in case definitions and reporting frequency (from daily to weekly) that were all implemented without an interruption of the system. Although IDPSS added work and a redundancy existed between it and the surveillance conducted by certain NGOs, NGO representatives reported that IDPSS was acceptable to them, even modifying their own surveillance systems to integrate better with IDPSS. However, completeness of report submission from NGOs was low and varied by site. Throughout February 18–April 9, a total of 78 clinics submitted at least one daily report. Among these, the median number of reports submitted per site was only three (range, 1–33). The most commonly stated reason for low report submission was the added work required. System managers reported an improvement with the switch to weekly reporting. This also had an effect on timeliness. During the daily reporting period, managers received reports within 1 day and the majority within 1 week. With the switch to weekly reporting, the majority of reports were received each week. However, after 2 months, reports were frequently submitted 2–3 weeks late.

Conclusions

IDPSS provided communicable disease surveillance in the IDP camps well suited for humanitarian emergencies, meeting an international standard of practice. It is timely enough to allow for rapid intervention and flexible enough to respond to the demands of a dynamic situation. Although it is a simple system, its workload diminishes its acceptability to NGOs. Using the Google group improved simplicity, acceptability, and timeliness by providing a common conduit for surveillance communication. Future surveillance systems for humanitarian emergencies should implement similar internet-based forums (for example, the IDPSS Google group) to facilitate communication. Surveillance

systems should take advantage of the NGOs' internal surveillance to avoid duplication of effort; however, this requires standardization of surveillance procedures by the humanitarian community.

Acknowledgements

This paper was presented as a poster at the 2010 International Society for Disease Surveillance Conference, held in Park City, UT, USA on 1–2 December 2010.