

Kuehne A, Keating P, Polonsky J, Haskew C, Schenkel K, le Polain de Waroux O, Ratnayake R: Event-based surveillance in low- and middle-income countries: a systematic review

Supplementary file 3: Systematic literature review on event-based surveillance in the field: Studies included for review and their quality assessment according to GRADE and adapted CDC guidance for surveillance system evaluations (N=15)

Setting	Author and Title	GRADE quality of evidence	Quality of the description of the purpose and operation of the EBS system										Quality of assessment of key elements of the surveillance system under evaluation												
			Importance of event described	Objectives described	Event under EBS stated	Use of data stated	Components described	Flow of information described	Integration described	Resources described	Feedback mechanism stated	Response mechanism described	Summary score	Level of usefulness	Data quality	Representativeness	PPV	Sensitivity	Acceptability	Timeliness	Simplicity	Flexibility	Stability	Other	
Outbreak setting	Ratnayake, R., et al. (2016). "Assessment of Community Event-Based Surveillance for Ebola Virus Disease, Sierra Leone, 2015." <i>Emerging Infectious Diseases</i> 22(8): 1431-1437. [21] & ERC. (2015). "Evaluation of the Functionality and Effectiveness of Community Event-Based Surveillance (CEBS) in Sierra Leone." [22]		1	2	2	2	2	1	2	2	0	1	15	Partly evaluated	Not evaluated	Not evaluated	Evaluated	Evaluated	Not evaluated	Partly evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated
	Stone, E., et al. (2016). "Community Event-Based Surveillance for Ebola Virus Disease in Sierra Leone: Implementation of a National-Level System During a Crisis." <i>PLoS currents</i> 8. [19] & ERC (2015). "Evaluation of the Functionality and Effectiveness of Community Event-Based Surveillance (CEBS) in Sierra Leone." [22]	Very low	1	2	2	1	2	2	2	0	0	0	12	Not evaluated	Evaluated	Not evaluated	Not evaluated	Not evaluated	Evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Process evaluation of implementation evaluated
	Lee, C. T., et al. (2016). "Evaluation of a National Call Centre and a Local Alerts System for Detection of New Cases of Ebola Virus Disease - Guinea, 2014-2015." <i>MMWR. Morbidity and mortality weekly report</i> 65(9): 227-230. [20]	Very low	1	2	2	1	1	0	2	0	0	0	9	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated
	Miller, L. A., et al. (2015). "Use of a nationwide call centre for Ebola response and monitoring during a 3-day house-to-house campaign - Sierra Leone, September 2014." <i>MMWR. Morbidity and mortality weekly report</i> 64(1): 28-29. [23]	Low	1	2	2	2	2	0	2	0	0	2	13	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Response evaluated
	Santa-Olalla, P., et al. (2013). "Implementation of an alert and response system in Haiti during the early stage of the response to the cholera epidemic." <i>The American journal of tropical medicine and hygiene</i> 89(4): 688-697. [28]	Very low	2	2	2	2	2	2	2	2	2	2	20	Evaluated	Partly evaluated	Not evaluated	Not evaluated	Not evaluated	Partly evaluated	Not evaluated	Not evaluated	Partly evaluated	Not evaluated	Not evaluated	Exit strategy evaluated
Routine setting	Clara A et al: Factors Influencing Community Event-based Surveillance: Lessons Learned from Pilot Implementation in Vietnam. <i>Health Security Volume 16, Number 51, 2018. DOI: 10.1089/hs.2018.0066 (not published yet)</i> [15]	Very low	2	2	2	2	2	2	2	2	1	1	18	Not evaluated	Not evaluated	Not evaluated	Evaluated	Not evaluated	Partly evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Factors influencing event incidence rate evaluated

Clara, A., et al. (2018). "Event-Based Surveillance at Community and Healthcare Facilities, Vietnam, 2016-2017." <i>Emerging Infectious Diseases</i> 24(9): 1649-1658. [16]	Very low	2	1	2	2	2	2	2	2	2	0	1	16	Partly evaluated	Not evaluated	Not evaluated	Partly evaluated	Not evaluated	Evaluated	Evaluated	Not evaluated	Not evaluated	Not evaluated	Sustainability partly evaluated
Merali, S., et al. (2018). "Lessons Learned from Community Event-Based Surveillance Implementation in Ghana." <i>ICEID</i> . 26.-29.08.2018 Atlanta	Very low	2	2	2	1	2	2	2	1	0	0	0	14	Not evaluated	Not evaluated	Not evaluated	Partly evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Lessons learned partly evaluated
Larsen, TM, et al. (2017). "Red Cross volunteers' experience with a mobile community event-based surveillance (CEBS) system in Sierra Leone during-and after the Ebola outbreak- A qualitative study". <i>Health Prim Car</i> 1(3):1-7. [17] & (2016). "A Qualitative Study of Volunteer Experiences With a Mobile Community Event based Surveillance (CEBS) System In Sierra Leone." <i>IJD</i> 53 Suppl: S116 [18]	Very low	1	1	1	1	2	2	1	0	0	0	1	10	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Volunteer experiences and lessons learned evaluated
Toyama, Y., et al. (2015). "Event-based surveillance in north-western Ethiopia: experience and lessons learnt in the field." <i>Western Pacific surveillance and response journal: WPSAR</i> 6(3): 22-27. [24]	Very low	0	1	2	1	2	1	2	2	0	2	2	13	Evaluated	Partly evaluated	Not evaluated	Evaluated	Partly evaluated	Partly evaluated	Evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated
Oum, S., et al. (2005). "Community-based surveillance: a pilot study from rural Cambodia." <i>Tropical Medicine & International Health</i> 10(7): 689-697. [30]	Very low	2	2	2	2	1	2	2	2	2	1	1	18	Not evaluated	Not evaluated	Not evaluated	Evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Resources needed: Costs and Training evaluated
Naser, A. M., et al. (2015). "Integrated cluster- and case-based surveillance for detecting stage III zoonotic pathogens: an example of Nipah virus surveillance in Bangladesh." <i>Epidemiology & Infection</i> 143(9): 1922-1930. [26]	Low.	2	2	2	2	1	1	1	1	0	2	2	15	Not evaluated	Not evaluated	Not evaluated	Partly evaluated	Partly evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated
Sharma, R., et al. (2009). "Communicable disease outbreak detection by using supplementary tools to conventional surveillance methods under Integrated Disease Surveillance Project (IDSP), India." <i>Journal of Communicable Diseases</i> 41(3): 149-159. [29]	Very low	1	1	2	0	1	0	0	0	0	0	0	5	Not evaluated	Not evaluated	Not evaluated	Partly evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated
Tante, S., et al. (2015). "Which surveillance systems were operational after Typhoon Haiyan?" <i>Western Pacific surveillance and response journal: WPSAR</i> 6(Supplement 1): 66-70. [25]	Very low	0	2	1	0	1	1	1	0	0	0	0	6	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Evaluated	Complementary function of IBS, EBS & syndromic surv. partly evaluated
Dagina, R., et al. (2013). "Event-based surveillance in Papua New Guinea: strengthening an International Health Regulations (2005) core capacity." <i>Western Pacific surveillance and response journal: WPSAR</i> 4(3): 19-25. [27]	Very low	1	1	1	1	2	1	2	1	2	1	1	13	Partly evaluated	Not evaluated	Not evaluated	Evaluated	Not evaluated	Not evaluated	Partly evaluated	Not evaluated	Not evaluated	Not evaluated	Laboratory confirmation evaluated