Rapid Grey Literature Evidence Review to Support the Guideline on Emergency Risk Communication

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2 February 2017

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1. Introduction

As part of its guideline review and development processes, in 2015 the World Health Organization (WHO) commissioned a rapid review of recent grey literature evidence to underpin development of the Emergency Risk Communication Guideline. This was intended to provide additional knowledge about building national-level capacity to integrate effective risk communication practices and structures into healthcare and response for public health emergencies. The principles of systematic reviewing as described by Cochrane were adapted to undertake this rapid review: The term public health emergencies included infectious disease outbreaks, natural and human-made disasters and spanned all phases of preparing for, responding to, and recovering from a public health crisis.

Twelve questions were initially elaborated and specified according to the Setting, Perspective, Phenomenon of Interest, Comparison, Evaluation (SPICE) framework. They were designed to answer "what works for whom in what contexts". This was further extrapolated in order to better understand 'what happened' or 'what was happening', positive and negative consequences, and lessons learned.

The reviews were commissioned to cover a time period from 2003 to the end of 2015. Given the fact that risk communication received a lot of attention in the wake of the Ebola, Zika and yellow fever outbreaks, it was felt that it would be beneficial to conduct an additional review of grey literature to capture these most recent developments. An additional question was therefore elaborated:

Q: What are the risk communication lessons learned from grey literature reports of recent events and emergencies with public health implications?

This question was to be answered in terms of each of the twelve original questions, listed below:

- Q1: How can emergency risk communication best be integrated into national leadership planning and execution for events and emergencies with public health implications?
- Q2: What are the best types of mechanism(s) to establish effective, cross-jurisdictional linkages for information sharing for emergency risk communication and internal coordination?
- Q3: How to best develop and sustain emergency risk communication staff capacity for preparedness and response?
- Q4: How to ensure sufficient and sustainable financing for emergency risk communication?
- Q5: What are the best and most generalizable emergency risk communication activities that build trust in health authorities as a source of health protection information among affected communities and other stakeholders?
- Q6: What are the best ways to ensure coordination of risk communication activities between responding agencies across organizations and levels of response?
- Q7: What are the elements and steps of effective, strategic communication planning?
- Q8: What are the best ways and most appropriate tools for gathering, analyzing, and interpreting emergency risk communication data and feedback and integrating results into emergency risk communication planning, strategy development, execution and evaluation?
- Q9: What are the best ways to engage communities in emergency risk communication activities to respond to events/contexts?
- Q10: What are the best social media channels and practices to promote health protection measures and dispel rumours and misinformation during events and emergencies with public health implications?
- Q11: What are the best ways to communicate uncertainties to public audiences, at-risk communities, and stakeholders?
- Q12: What elements and timing of messages are best at influencing public/community levels of concern to motivate relevant actions to protect health?

2. Search strategy

The search was designed to locate recent grey literature sources 'published' in 2015 and 2016. Keyword searches were conducted in online databases greylit.org, worldcat.org, opengrey.eu, evidenceaid.org and disasterlit.nlm.nih.gov. In addition, several particularly relevant websites were searched, zikacommunicationnetwork.org, Ebola Response Anthropology Platform (ebola-anthropology.net), ebolacommuniationnetwork.org. Site searches combined keyword searching and following links.

Keywords were selected based on search terms used for previous reviews and the searcher's reading of the search questions. A detailed breakdown is provided in Appendix 1.

In addition to the online searching, the WHO team of experts was contacted for document suggestions. An online request for documents from partner and non-partner organizations was posted on various risk communication platforms. In addition, a number of experts submitted documents via email. Submissions were accepted through 31 December 2016. This proved to be a rich resource, returning higher numbers of documents from more credible sources than were located with other forms of searching.

If word scans of documents revealed keywords in the documents' bibliographies, these bibliographies or provided links were mined for further possibly-relevant sources.

Inclusion/Exclusion criteria

Retrieved documents were excluded if they were situation assessments, presenting only prevalence-type information, if they did not relate to communication, if they did not relate to disasters or emergencies, or if there were broken links and the documents could not be located. If full-text copies could not be obtained, the work was excluded. Documents dealing exclusively with active shooter/bomber situations or general refugee issues unrelated to disease outbreaks were also excluded. Proposed studies or studies in progress were listed as potentially of interest, but not included in this analysis. In addition, documents outside the date limits set for this search were excluded.

News articles were generally excluded, except for a couple extremely well-documented and highly pertinent articles. Since by definition grey literature excludes journal articles, these were also not included. Instead, relevant journal articles encountered in the search process were added to a list for cross-checking against earlier literature searches. General risk communication materials, such as pamphlets, posters and infographics, were excluded as they do not provide information about their effectiveness or lessons learned. Lack of transparency due to missing methodology information was also grounds for exclusion.

In the interest of efficiency and focusing on the most credible sources, video footage of conference proceedings were not reviewed, nor were blogs, courses, educational videos, or television or radio spots. As PowerPoint presentations are not considered grey literature, they were generally excluded. Exceptions have been made in rare instances where the presentations were basically written papers, simply placed in PowerPoint, rather than in typical document formats. This same rule applied to toolkits, checklists, fact sheets and secondary sources. Guidelines were also excluded, as a review of them had recently been completed, making their inclusion redundant.

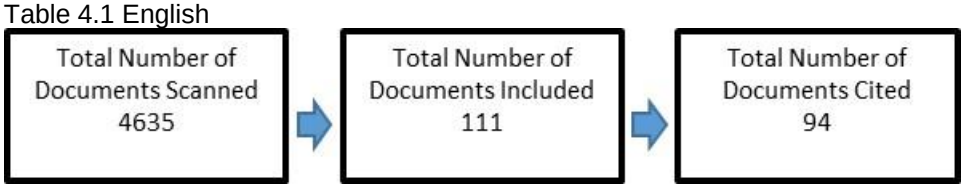
To be included, documents needed to fall within the search date limits, relate to emergency risk communication, and contribute to lessons learned.

3. Search Outcome

As presented in Table 4.1 English, below, a total of 4635 English documents were scanned, of which 111 met inclusion criteria and 94 were cited in the report. Documents included in results but not cited were documents which provided background information potentially of interest to the search process, but which did not directly pertain to the search questions. Please note that the total number of documents

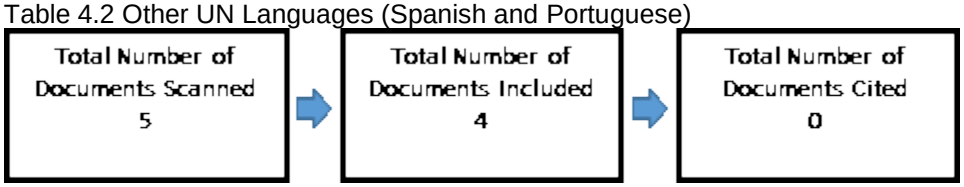
scanned represents the total number of results returned by the various searches. Many of these overlapped, with the same document appearing in the results for multiple searches. As such, this number does not represent individual, discrete documents. Furthermore, although exact numbers of results returned were provided by most databases, EvidenceAid.org did not provide the total number of results listed, nor did other individual websites searched. In addition, although documents from the team of experts were provided in spreadsheet form from which a total number could be derived, many of the cells in this spreadsheet contained multiple documents. For these reasons, the total number of documents is an estimate.

Table 4.1 English



A total of five documents in other UN languages were scanned, two in Spanish and three in Portuguese. Table 4.2 Other UN Languages, below, summarizes the search process for documents in other UN languages. A complete list of included documents in other UN languages is provided in Appendix 2.

Table 4.2 Other UN Languages (Spanish and Portuguese)



4. Appraising study quality or the credibility of evidence sources

Each document was evaluated for credibility using an Authority, Accuracy, Coverage, Objectivity, Date, Significance (AACODS) checklist. If the document contained a qualitative study, a Critical Appraisal Skills Programme (CASP) Qualitative Study checklist was also completed. Although some cross-sectional data collection was found, no appraisal of methodological strengths and limitations was undertaken due to lack of time. No other form of study type was included in the reviewed literature.

An AACODS category was considered a yes if most of the questions within it were answered with yes. Sources with two or fewer yeses were considered low credibility. Those with three or four yeses were rated moderate, and those with five or six, high credibility.

Since most documents identified in the search have not been studies per se, but reports or evaluations or other types of materials, very few reported on methodology, limits, or data collection. Credibility evaluation has therefore focused primarily on authority.

Documents were assigned high credibility only if they stemmed from authoritative sources (authors or organizations) and included proof of interaction with the literature (bibliography, endnotes or footnotes). If only one or the other of these were present, documents were assigned moderate credibility. Documents with neither were assigned low credibility.

A copy of the AACODS tool can be found in Appendix 3.

5. Data extraction and synthesis

A rapid content analysis of included sources was undertaken with relevant portions either extracted verbatim or summarized and mapped against the questions. A database subset was created for each question and citations were assigned to the subset(s) for which they contained relevant information. Multiple designations per document were common. Once all documents had been sorted in this way, the database subsets were used to synthesize the results into a coherent narrative.

6. Findings

Potentially relevant documents were identified for all twelve search questions. However, this should not be construed as meaning evidence was found for all twelve questions. Although documents discussing the topics were found, sometimes these documents did not represent lessons learned or study results. More information about this can be found in the individual search question results presented below. Detailed summaries of the evidence, listed by question, are provided in Appendix 4.

Of the 111 documents included in this review, 16 reported the data collection and analysis of primary data such as cross sectional surveys. The other documents reported situation analyses or evaluations drawing on analysed data from internal organisational or external published sources. The credibility of the majority of the document sources varied and findings are presented by each question. In common with grey literature reports few sources reported any methods or references to support the analysis.

Q1: How can emergency risk communication best be integrated into national leadership planning and execution for events and emergencies with public health implications?

Five documents were identified as potentially relevant to this question. Of these, three were assessed as being high credibility sources and two as moderate credibility. Although identified as possibly relevant, none of these documents provided evidence regarding intervention or action outcomes, nor did they specifically address risk communication per se.

The closest a document came to listing results was the statement that countries like Uganda have demonstrated that building a public health system capable of responding to and containing an outbreak of infectious disease is possible; it requires leadership. Critical to such a system is community engagement, as well as their awareness, trust and cooperation (1). This implies risk communication.

In BBC Media Action's policy briefing, Caroline Sugg noted that despite acknowledgement of the important role it plays in health, communication too often remains an underfunded afterthought. She stated that social and behavioural change communication should be included as an integral part of health programs and that an "institutional home" should be created for health communication (2).

The United Nations General Assembly stated that International Health Regulation (IHR) compliance includes establishing preparedness and response mechanisms. Community engagement and culturally appropriate communication form an integral part of such mechanisms (3). This also implies integration or risk communication into national health plans.

Additionally, in its Ebola Response Improvement Plan, the United States Department of Health and Human services noted the importance of prioritizing risk communication. A department-wide emergency risk communication strategy was to be developed, including training staff to serve as spokespersons and planning to ensure an adequate supply of such trained personnel (4).

These findings indicate that action does not yet meet intention. Political will needs to be engaged to ensure appropriate prioritizing of risk communication as an integral part of public health.

Q2: What are the best types of mechanism(s) to establish effective, cross-jurisdictional linkages for information sharing for emergency risk communication and internal coordination?

Five documents from high credibility and four moderate credibility sources were identified as pertinent to cross-jurisdictional coordination. Of these, all but two dealt with WHO and the International Health Regulations. Since most coordination findings also pertained to interagency coordination (Question 6, below), they are not addressed here. Only items not covered in Question 6 are discussed here.

One model for improving cross-jurisdictional linkages and coordination came from the polio eradication campaign. When eradication efforts stalled, an independent monitoring board of experts drawn from around the world was established. This board used a combination of strong leadership, clear goals against which to measure progress, and frank speech about under-performing programs, as well as a program of cross-border meetings and synchronization to encourage compliance and make great strides in the eradication of this disease (5, 6).

The second example of cross-jurisdictional linkages and coordination came from WHO and the International Health Regulations (IHR), and is undergoing a significant readjustment. Prior to the West African Ebola outbreak, the question remained open as to whether WHO should be an operational agency in addition to its norm-setting and coordinating capacity (7). Post-Ebola, various review bodies and the Member States articulated that WHO should become an operational agency, taking the lead in emergency preparedness and response. A new Health Emergencies Program was established to be the nerve centre of global emergency preparedness and response (3, 8, 9). Its implementation is still too new for evaluation. The IHR were found not to be in need of revision, but in need of implementation instead (10, 11).

Q3: How to best develop and sustain emergency risk communication staff capacity for preparedness and response?

Sources addressing capacity agreed that building capacity was needed. One document reported that national capacities to detect and respond to emergencies needed to be built, along with personnel capacity, especially in rural areas (12). Another observed that the presence or absence of a risk communication plan does not necessarily indicate capacity, nor do elements of infrastructure indicate operational capabilities (13). A third stated that health communication capacity building, especially for local health agencies and personnel, has long been neglected (2). This failure to develop local risk communication capacities has led to reliance on outside experts being brought in in times of crisis (14).

Two documents addressed this imbalance in the locus of risk communication capacity. Rather than relying on outside assistance, risk communication capacity should be based at each "geographic" level, local, national, regional and global, with clearly defined roles, responsibilities and infrastructure (13). Particular focus needs to be on developing national capacities (14).

Most documents relevant to this question focused on listing the specific capacities that need strengthening. Softer communication and interpersonal skills (15, 16), along with consensus-building (including document preparation), analysis, documentation (17), monitoring and evaluation were all considered important to build (13). Staff need to learn to recognize variables known to provoke outrage, such as perceived unfairness, moral indifference, and impacts on vulnerable populations, and treat them as central to public health objectives, rather than dismiss them (18).

Other important functions in need of capacity building included strategic communication strategies, plans and standards of practice, trust building strategies and activities, and coordination skills and capacity. Stakeholder and partner communications, community engagement, socio-political, economic and cultural analysis for risk communication, and translational communication of technical expertise into understandable, contextualized material also received mention (14).

A cadre of personnel should be trained in health crises and risk communication, and refresher training provided should be provided at least annually (19) (20). Media personnel should be trained in public crisis communication (21).

In contrast to most of the documents included for this question, one study focused on staff slated for crisis deployment. It found that sharing a basic training program and actually serving in the field together helped foster trust between emergency risk communications specialists, enabling

them to engage effectively more quickly upon deployment (22). Creating and maintaining a roster of such specialists, or teams of such specialists, could also represent one way to develop and sustain staff capacity.

Greater prominence needs to be given to health communication capacity building. Benchmarks need to be agreed upon, and universities need to integrate it into their courses (2).

Thirteen documents were identified as potentially relevant to the question of developing and sustaining staff capacity in emergency risk communication. Of these, eight were from high credibility sources and five from moderate.

Q4: How to ensure sufficient and sustainable financing for emergency risk communication?

Similar to the previous literature review conducted for the question of sustainable financing for emergency risk communication (23), this quick review of grey literature found very little relevant material. Of included sources, 26 mentioned financing or funding in some way, 12 of which had high credibility sources and 14 moderate. Several of these discussed health funding in general or for specific programs, without mentioning risk communication funding (3, 7, 10, 24-31). Others mentioned specific amounts allocated for risk communication activities, but these were one-off grants, and therefore not sustainable funding sources (32-38).

Although of those discussing risk communication funding, several called for increased funding from national governments and donors, or expressed need of it (2, 3, 39), real action in terms of supplying such funds, except as if in afterthought, appeared scarce (2).

Several sources referenced WHO's new Health Emergency Programme. While true that the Programme's mandate and budget include risk communication, this still does not answer the question of sustainable risk communication funding, as the Programme itself needs sustainable funding (1). Furthermore, funding public health systems, emergency or otherwise, remains a responsibility primarily of domestic budgets (1). Several mechanisms for sustainable funding were suggested, such as a combination of varying levels of domestic funding coupled with funding from other sources for LMIC, but no information about the effectiveness of such mechanisms was provided (1).

One source mentioned user fees, taxes and donor support as possible ways of funding health care, noting that user fees are the least equitable of these mechanisms as they punish the poor (26). Another suggested that funding previously earmarked for polio now be used for social mobilization for general health education (6). A third report noted that Congress did not approve additional funding for Zika prevention, so the CDC has taken money previously marked for local health department preparedness and reassigned it to the national Zika campaign (40). Rather than being an example of sustainable funding, this seems a case of robbing one part of a programme to pay another.

One thing several reports seemed to agree on: A number of reports mentioned that lack of funding hampered initial risk communication efforts at the beginning of the West African Ebola outbreak (36, 41-43).

Q5: What are the best and most generalizable emergency risk communication activities that build trust in health authorities as a source of health protection information among affected communities and other stakeholders?

One of the most important steps toward building trust is community engagement, the grey literature was nearly unanimous about this. Community engagement builds trust, and greater trust fosters community engagement. Because of this overlap, much of what pertains to trust-building is covered

in Question 9. Rather than duplicate this, examination of lessons learned here will be limited to those which were listed nearly exclusively in relation to trust-building.

The populations of all three countries most strongly hit by the Ebola outbreak, Guinea, Liberia and Sierra Leone, displayed strong mistrust of government and outsiders. Their political realities played crucial roles in this situation(7): All three recently experienced devastating civil wars. All three had ethnic diversity, with tensions between ruling parties and those groups not in power. Other factors contributing to mistrust included the legacy of colonialism, attempts to "modernize" that involved efforts to eliminate traditional religion, lack of local representation in government, and the necessity of frequently having to bribe authorities just to get through daily life. This lack of trust gave rise to vicious rumours (government plots to market human organs or eliminate minority populations) and hampered response efforts in general (42-45).

Initial messages warning people not to eat bush meat further increased mistrust, as local populations recognized that this did not explain Ebola transmission (45-47). Political pressure undermined transparency and trust, as did measures of force, such as placing over a million people under quarantine, or state-enforced cremation (13, 43, 48).

Although written about communications experts trained for deployment by WHO to emergency situations (Emergency Communications Networks or ECN), Bastide's study shed light on why certain types of interventions build trust. One thing these networks succeeded at is spreading trust. Bastide noted that this trust comes from shared experience. People have trained together or have already worked together, so they share common experiences, which builds bonds and generates complicity trust. Sharing a base of technical skills, norms and values fosters recognition trust. The study further noted that complicity trust is deeper and stronger than recognition trust, because it is emotional and involves intimate experience of those trusted (22).

As mentioned above, community engagement and building trust work together. The single greatest factor in successful community engagement was maximum local involvement (see the discussion of Question 9, below). Local populations come with ready-made complicity and recognition trust. They share both experiences and a common set of life skills, norms and values. However, as one report noted, not all locals have equal trust-building effect. Some leaders were not trusted, and some people did not trust those being paid to do Ebola work (49). Use of volunteers helped address this latter issue.

Trust in health systems is based not only on objective measures of these systems (the number of facilities or quality of service delivered), but also on people's perceptions of these systems. If people think a system is unlikely to help them, they will not use it. Once again engaging people is the solution, for example, by involving people in service delivery meetings (15, 50).

Healthcare workers treating people disrespectfully erodes trust. Staff needed training/development of softer communication and interpersonal skills to help build trust (15, 50, 51). One report also noted that providing mental health services to healthcare workers helped relieve their stress and enabled them to interact better with members of the public, thereby also helping to build trust (51).

Timing also plays a role in trust building. Communication needs to acknowledge a crisis immediately and be open about uncertainties (13).

Of the 17 documents referenced in this section of the report, 11 were from high and six from moderately credible sources.

Q6: What are the best ways to ensure coordination of risk communication activities between responding agencies across organizations and levels of response?

The grey literature covered in this quick review offered little information about best ways to ensure coordination of risk communication activities. A total of 33 documents were identified as potentially

relevant to this question, 18 from sources of moderate credibility and 15 of high. Most sources did not focus on risk communication coordination specifically, addressing general collaboration and coordination instead. Many documents provided details of collaborative or coordinating activities or bodies, but no details about their effectiveness. In addition, Quite a number of documents focused on the role of WHO and the establishment of its Health Emergencies Programme.

Of the 33 documents identified, all but four grew directly out of either the Ebola or Zika responses, and even one of these touched on the Ebola outbreak, although it was not the main focus. One paper reported a disconnect between risk assessors and risk communicators, seeming as if they spoke different languages. Simulation exercises and training of risk communications personnel on the principles of risk assessment were recommended as possible solutions to this challenge (13). Two documents presented the importance of coordinating with the press, before and during an incident, meeting their needs and remaining available to them. This type of coordination was found especially important as many people depend on the media for their health information (18, 52).

The overwhelming majority of sources for this question, 28 documents, dealt with the Ebola outbreak. Three highlighted local collaboration efforts. In Montserrado County, Liberia, OFDA funded the International Rescue Committee (IRC) to lead a consortium of four other non-governmental organizations (NGOs). This proved to be more effective than their efforts working separately, as it allowed organizations to focus and capitalize on their areas of strength. It also allowed them to advocate more effectively with the government. Sharing information between consortium members was vital to effective work and helped build trust, as did getting technical input from WHO (53). Another report also found that a consortium improved coordination. This consortium, the Social Mobilisation Action Consortium (SMAC), worked through local religious and community leaders, social mobilizers and local radio, ensuring coordination not only of interventions, but also of messages (36). Y Care also found that the National Ebola Taskforce and the Pull Slum Pan Pipal Consortium helped improve coordination (41).

Another report focused on the specific nature of needed coordination, noting that, “More attention needs to be paid to the connections, feedback loops and relationships between different individuals and different organisations across the local, district and national levels. Priorities for attention include: data reporting and management; sustained supportive supervision of health workers; integration of grievance mechanisms and other social accountability tools into public services; and coordination methods that actually facilitate coordination rather than just information sharing” (50).

Where coordination efforts should be based also received attention, as did the importance of clearly defined roles and responsibilities. One report recommended that well-organized coordination systems be based at the district level (54). Another noted the importance of clearly defined roles for all those implicated in a response effort (52).

Fifteen documents focused on WHO and its role in the Ebola response. In this response, WHO served as technical lead, providing training, monitoring and evaluation, as well as leading the overall health response (27). This response was perceived as too slow and inadequate, overly political and not independent. Member States felt that in order to fulfil its mandate, WHO must improve its performance and change these perceptions (9).

Member States expect WHO to play a primary role in responding to outbreaks or other health emergencies, providing leadership, expertise, support, backstopping and coordination (9). A potential tension was identified between the expectation for WHO to lead coordination efforts and the necessity of tailoring risk communication for local populations and circumstances. Primary responsibility for response must rest with national governments, and WHO’s role will need to flex, sometimes leading, sometimes “getting out of the way”. Focus should be on building local capacity (55). For both WHO and other organizations, leading and coordinating crises was seen as the biggest skills gap (56). A number of recommendations addressed filling this gap.

As global health cluster lead, WHO has been tasked with coordinating partners and their activities before, during and after health emergencies. This includes developing mechanisms for local, as well as global coordination and articulating common risk communication goals, building strong relationships with partners and clarifying roles and responsibilities (14). These coordination efforts should be led through meetings and teleconferences, and establishment of Emergency Response Centres (11). These centres should include risk communications expertise (57). Response capacity needs to be based at the district level, and WHO should to continue to lead district-level coordination, ensuring that each district has a tailored and flexible plan (58).

In addition to these measures, WHO established a standing advisory committee to review its risk assessment and risk communication. It also created an intermediate level of alert via a new category of risk that requires specific follow-up, called an International Public Health Alert (IPHA), and developed an updated communication strategy (10).

These reforms have begun to be implemented (31, 37) and the initial Zika response looks promising (12, 16), but it is still too early to determine the effectiveness of these reforms (59).

Q7: What are the elements and steps of effective, strategic communication planning?

According to the grey literature, effective, strategic communication planning begins long before a crisis and involves a number of steps. A number of documents found that groundwork needs to be laid before an emergency. This includes creating a strategy and framework for communicating with all stakeholders, developing and vetting basic messages for issues likely to arise during a crisis, training communications personnel, and developing a system for rapid message review and approval (4, 14, 18, 19, 52). Roles and responsibilities should be outlined and clearly defined (14, 52), and a network of communication partnerships should be created and maintained. A plan for working with the media should be developed (14, 18, 21, 52), as should a media toolkit (52). Adequate and timely funding should be secured (2).

A second finding was that the communication process needs to start early (42). An essential beginning step of communication planning is to discuss the situation with community leaders and members and to conduct an initial assessment. This helps identify the best communication channels to use and any barriers or potential problems, as well as potential solutions (24, 60).

One study noted that medical anthropological assessment should be used at the beginning of a response, so that messages and responses can be shaped accordingly (61). This assessment should include listening to complaints and taking into account the customs and cultures of all involved groups (18, 44). Top-down communication should be avoided, as this can exclude and alienate people (62). Instead, messages should be tailored to their target groups (52).

An example of these steps was provided by the Community Led Ebola Management and Eradication (CLEME) approach. CLEME started with an assessment of the situation, community mapping, collecting information about caring for the sick and the dead and a walk-through of the community. As a community, interventions were decided upon, tailored for specific groups and implemented. Contextual analysis, follow-up visits and feedback shaped intervention adjustments on an on-going basis. Ebola and other health education was then to be integrated into all community programs to prevent future outbreaks (63).

Once initial messages were disseminated, it was important to monitor their effectiveness and adjust them as necessary. One option for this was to use barrier analysis, comparing those who had adopted behaviour changes with those who had not, to help elucidate barriers to change, uncover perceived positive and negative consequences of behaviour changes, and fine tune messages accordingly (49). Social mobilizers could be used in this process. They could listen for misinformation and rumours, which could then be addressed swiftly (14, 21, 24). Two documents noted that the process of listening to the community, taking their concerns seriously and adapting messages accordingly should continue throughout the emergency (18, 21).

Additional elements of good communications planning were found to include distinguishing evidence-based messages from uncertain ones (36), ensuring that lessons learned are captured and applied (2, 21), and building local communication capacities (14, 36).

For this question, 16 potentially relevant documents were identified, 11 from sources of high credibility and five from moderate.

Q8: What are the best ways and most appropriate tools for gathering, analyzing, and interpreting emergency risk communication data and feedback and integrating results into emergency risk communication planning, strategy development, execution and evaluation?

Only three documents with potential relevance to this question were identified, two of high and one of moderate credibility. This low number of results seems appropriate, as two of the three sources concurred in expressing a paucity of evidence in this area.

Participants in one study expressed a lack of evidence about the effectiveness of different types of risk communication, as well as a lack of methodological frameworks and tools to evaluate risk communication. They further stated that having each country at a different level made comparative analysis difficult (13). Another report echoed these sentiments, noting that gaps and misalignments existed in the evidence, along with disagreement about what types of studies were acceptable. Even when studies were performed, the tendency was to focus on numbers of people reached, rather than on whether behaviour actually changed. Finally, funding for risk communication evaluation has diminished: apparently little demand for rigorous research exists (2).

Still, one document noted several aspects of risk communication that lend themselves to measurement: the time between threat perception and message release, the time between message release and public uptake, and the level of coordination with stakeholders and across units. Data could also be collected about how the message was delivered, received and acted on. Efficiency could be measured in terms of time saved, political pressure reduced and minimized media incidents. Effectiveness could be measured with KAP studies. These types of measurements should be taken before, during and after emergencies, to establish a baseline and to determine if messages need to be adjusted, as well as to evaluate overall performance (13).

Several study methods were presented as possibilities for evaluating risk communication programmes. According to one study, quasi-experimental research designs, interrupted time series analysis and studies that use statistical controls like propensity score matching to reduce the potential bias of confounding variables are being used more frequently, along with qualitative research. These represent best health communication evaluation (2). Other methods for evaluation include focus groups, interviews, KAP and other population surveys, opinion surveys and media/social media monitoring (13). With the Community Led Ebola Management and Eradication programme, revisits to communities were used to monitor, evaluate and adjust programs (63).

Q9: What are the best ways to engage communities in emergency risk communication activities to respond to events/contexts?

Overwhelmingly the grey literature found that engaging communities should play a central role in emergency responses. Not only is community engagement key to building trust, but as one report noted, local efforts also played the most important role in turning the Ebola tide, because the turning point was reached before the full-blown response was operational (53). It is fitting, then, that more documents were found relating to this question than to any other.

Sixty-eight documents were identified as contributing to this question, thirty from high credibility sources, 36 from moderate and 2 from low. The two low credibility sources were retained, as they represented opinions of those working on the frontlines of the Ebola outbreak, and as such were

considered worth noting, even if they were not well documented. Lessons gleaned from these materials fell into two categories: Things which improve community engagement, and barriers to community engagement. Each are addressed below.

Things which improve community engagement

The grey literature examined in this quick review found a number of methods which improve community engagement, thirteen of the most common of which are listed in Table 6.1 Community Engagement Methods, below. In the table, each engagement method is followed by the number of documents which mentioned this method as improving engagement success. Essentially, these lessons learned could be summarized in two words: Go local. The literature found that communities responded best when as much as possible was done locally – involving local people, respecting local culture, language and circumstances, and listening to local concerns and opinions; all this on an on-going basis.

Table 6.1 Community Engagement Methods (by number of documents*)

Engagement Method	Total Documents
Engage local leadership and key people	31
Tailor interventions for population, gender, circumstances, language	26
Use locals as mobilisers	16
Community creates own interventions	15
Engage local groups	15
Listening & 2-way communication	15
Use local media	12
On-going monitoring & evaluation (feedback)	11
Use anthropological assessments	10
Start communication early	8
Use visual aids, role plays & story telling	6
Community conducts own outbreak analysis	3
Decisions made at local level	3

*Sources provided in Appendix 5.

Involving local leadership was listed by 31 documents as an important step toward community engagement. Using local people as mobilisers and engaging local groups were also seen as important, with 16 and 15 documents respectively mentioning this as helping gain access to communities and to successful uptake of behaviour changes. Further detail about who these people and groups are is provided in Table 6.2 People and Groups to Engage, below.

Table 6.2 People and Groups to Engage*

People to Involve	Total Documents
Religious leaders	18
Traditional leaders, chiefs, elders	16
Other local authorities or leaders	11
Women & Women's groups	11
Health Workers	10
Youth groups	9
Traditional healers	7
Others (hunters, taxis, market groups, hospitality industry)	5
Survivors	4

*Sources provided in Appendix 6.

The group of people listed most as important to involve were religious leaders (18 documents), followed by traditional leaders, other local authorities or leaders, and women or women's groups. Targeting women particularly, not only for epidemic response efforts, but for health improvement in general, has proven very effective (64, 65). One report stated that engaging women is critical to changing behaviour. It likened Ebola to a fire and women to water, noting that water puts out the fire (66). Health workers, youth groups, traditional healers and other groups, such as hunters, taxi drivers, market groups and those involved with hospitality businesses (restaurants, bars, hotels) were also found to be important inroads into communities. Using locals as mobilizers also proved affective, although Quinn emphasized that locals should be selected based on their understanding of local culture and for being trusted by the local community (12).

Tailoring interventions for gender, language, local cultural nuances and circumstances has also proven effective, ideally with communities assessing the situation themselves and crafting their own messages, with regular monitoring and feedback to allow for further adjustments.

This makes sense, because as a general rule, most people prefer to have a choice in what they do. Since communities are conglomerates of people, not surprisingly this holds true for them too. A number of sources noted that response efforts were most effective when they were owned and driven by local communities and local leadership (3, 28, 35, 54, 67, 68). Another report also emphasized this, along with the importance of participatory decision making and focusing on the strengths of local populations (53). Communities need to be allowed to differ from each other (28) and compassion should be communicated. People's fears and concerns need to be acknowledged, and a sense of self-efficacy conveyed (3, 18, 21, 36, 56).

Community engagement in emergency risk communication should start long before an emergency occurs. Connection with community entities should be established and relationships of trust developed before a crisis, so that these networks of Ailles may be activated should an emergency occur (18, 21, 55). The importance of building on these existing relationships was noted in several documents (20, 55, 69). Two others expanded this to include recognizing and building on local organization (60, 70). The public should also be considered an ally to partner with (18, 21).

As far as specific forms of engagement were concerned, radio was identified as a particularly effective means of accessing communities (42) (20, 41, 43, 71), although De Roeck notes that if specific, limited groups are the target audience, broadcast media may not be the best choice for communication (24). House-to-house visits (35, 41, 43, 69, 72-74) and religious gatherings (43) were also found to be effective. Some reports found that door-to-door visits worked best, followed by the use of drama and dance (73, 74).

Another form of community engagement that has proven effective, especially in value-laden situations of an educational nature and where guidelines are being provided, is public deliberation. This involves recruiting an inclusive selection of community representatives, presenting the expert evidence and guidelines to them, then facilitating discussion and making decisions in a participatory manner (75).

How safety measures are implemented also effects their uptake. Richards noted that rural communities regret these measures (curtailing traditional handshaking and burial rituals), but they understood and were willing to comply, although they would prefer to be trained to do safe burials themselves (76), or at least have their traditions respected as much as safety protocols would permit (46).

Miller noted that attention must be paid to political realities, both historic and current (7). Political realities shape the landscape of relations between power structures and communities, including issues of mistrust. Community engagement efforts must bear this in mind or engagement efforts will

be frustrated. Involvement of trusted local leaders is imperative (7, 36). Transparency is also important (77).

One report also listed school-based programs as an effective engagement strategy (78).

Barriers to community engagement

The grey literature identified several barriers to community engagement. DuBois noted that top-down communication, stereotyping and paternalism broke down trust, created fear and alienated communities whose support was critical to a successful response (62). Use of force or trying to force change was also counter-productive (48, 69, 73, 74).

Another barrier to successful community engagement and uptake of prevention messages was the failure to distinguish evidence-based messages (avoid contact with bodily fluids of infected and dead) from uncertain messages (eating bush meat). This was compounded by the apparent unwillingness of those issuing health messages to admit and explain their errors. Richards cited the initial ban on bush meat consumption to illustrate this, noting that the later change of this message was not explained, nor error admitted (46). Lack of message coordination further confused the issue (36).

It may also be possible that not all community engagement efforts are equally engaging or community led. Gautier noted that despite engagement with local leaders, shaking hands and respecting safe burial practices remained a challenge (73, 74). One could question whether this was due to the intervention still being top-down in that training was provided to community health workers and local leaders, rather than allowing the community to conduct its own assessment and devise their own solutions and protection measures. One report noted that the age (young) of the sensitizers may have negatively impacted the uptake of messages (74). It is unclear whether initial training was provided to both community health workers and local leaders together, or if training was provided primarily to (young) community health workers (CHWs), and only through them to community leaders. If the latter, this could have represented a continued failure to acknowledge, respect and work with local leadership.

Barriers to successful engagement and uptake of prevention measures may find their root in a quite different source. Both Gautier reports noted that lack of resources (gloves, boots, financing) hindered implementation of safe burial practices. Both state that more focus should have been placed on the practicalities of implementation (73, 74). Oxfam also noted the need for sanitation supplies, such as bleach, gloves, and boots (79), and Y Care noted that lack of funding impeded early response (41). These reports highlight that the success of behaviour change communication can be confounded by lack of resources. This does not necessarily mean the communication has been ineffective.

The less-settled ways of urban areas can make community engagement more difficult than in rural communities. One report noted that the absence of traditional community structures and organizations in urban areas made the work there more challenging (53). Richards fine-tuned this observation, noting that in rural communities, villagers had “face-to-face social knowledge” of Ebola – they could name everyone who has died or survived and trace the pattern. This and villagers “mutual accountability” helped them understand the necessity of safe practices in regard to the sick and dead. This knowledge and accountability are absent in urban areas where all are “strangers” (76).

Finally, the tone of communication with communities also mattered. When health workers “talked down” to community members, community members did not wish to interact with them and therefore avoided them and the health care facilities. Use of respectful speech by health workers and providing tours of health care facilities helped reduce fear and enabled improved engagement with communities (51). Other reports also emphasized the importance of treating people respectfully (55, 58, 68). This respect should include respect for their opinions (2).

Q10: What are the best social media channels and practices to promote health protection measures and dispel rumours and misinformation during events and emergencies with public health implications?

The grey literature covered in this rapid review offered little information about the best social media channels and practices for risk communication. Of the 20 documents included as potentially relevant, only two (2, 80) provided numbers, and even these numbers did not really indicate effectiveness. Other documents described uses of social media, but judging their effectiveness was difficult (81), as they took place in the context of a number of other simultaneous interventions. What these documents can do, is point the direction, showing what these new media forms may be able to do. Of the documents reviewed, two were from low credibility sources, eight from moderate and 10 from high.

That social media is being used is an accepted reality. During the Ebola outbreak, MSF's online and social media saw an upswing of use, as did their blogs and Facebook pages (17). WhatsApp showed use around Freetown in Sierra Leone (82). In New York City, social media was used to counter rumours when Dr. Craig Spencer tested positive for Ebola (83), and one study found that 87% of doctors in Brazil 87% use WhatsApp to communicate with patients, one of the highest rates of such use in the world (80). In West Africa, chat apps, especially WhatsApp, were considered better than SMS because they were cheaper. WhatsApp also proved useful in tracking rumours(36). Other new useful media tools included RapidPro and SMS systems (65). It was also found that social media is being used increasingly to monitor what the public is saying about public health issues (13).

SMS or text messaging was used successfully to track and combat rumours and to communicate with quarantined areas during the Ebola outbreak (21, 42, 43). In addition, a collaborative effort between BBC and WhatsApp enabled messages from WHO, UNICEF and the CDC to be channelled directly to 20 thousand subscribers, most of whom were in West Africa. The Sierra Leonean version of this channel had 15 thousand subscribers by the end of the outbreak (2). SMS was also used for real-time monitoring (84). Nigeria used mobile phones to disseminate Ebola messages (26), and the government of Sierra Leone chose WhatsApp as one of its official response channels (81).

One innovative feature of social media use during the West African Ebola outbreak was the way it enabled the Sierra Leonean diaspora to play a role in in-country social mobilization. Sierra Leoneans living abroad used Skype, Facebook and WhatsApp plus their in-country connections' smart-phone-enabled Internet access to share information about the outbreak. Facebook discussion groups were also created and used. Although at least initially, some members of the diaspora circulated rumours over social media, some also did their best to communicate accurate messages. Later on, members of the diaspora who were in health professions used social media to mobilize their in-country family, professional, business and political connections (81).

The communication potential of social media was perhaps best illustrated by Brazil, where phone use has overtaken television as the main form of media consumption. For good or ill, traditional media and social media are now equal partners in Brazil's media world (80).

But the news about social media was not all positive. One report listed social media as a source of Zika-related rumours, as well as a place for ministries of health and other public health bodies to post messages (16). This was also true for Ebola (81). And social media's apparent success in urban Sierra Leone should be balanced against the observation that most mobile phone use was concentrated in larger urban areas. Rural areas remained relatively isolated from social media's effects (81).

In addition, documents found that social media suffers from a credibility issue. Although in the United States, most people received Zika information via TV, radio, social media and blogs, the CDC and family doctors were considered the most credible sources (29).

Another challenge posed by social media was the difficulty in controlling messages. Once on the loose in cyberspace, video clips or other messages took on cyclical lives of their own, peaking, dying down, then resurfacing. This held true for rumours as well as official messages (80).

Nor did social media necessarily represent the best solution. One study found that people who used conventional media or government sources for their health information were more likely to be knowledgeable about Zika than were those who relied on friends, family or social media for health information (85). Another stated that despite the current trend of wanting technology to provide nearly magical solutions to problems, Ebola was a problem that was solved by "brute force", meaning the physical labour of sanitation work and the human contact of social mobilization. It found that, "No form of engagement was more effective than face-to-face discussion, and there are no technological short-cuts for safe burial and body management. This was not a crisis solved by new technologies and innovations, but by an enormous amount of human and other resources" (69).

These detractors, rather than showing that social media should not be pursued, serve instead as a reminder that conventional media still plays a dominant role in most health communication situations. One report expressed this well, advising that the concept of media be expanded to include social media (18). When it comes to getting messages out, both conventional and social media should be used, rather than just one or the other.

Q11: What are the best ways to communicate uncertainties to public audiences, at-risk communities, and stakeholders?

When discussing communication about uncertainties, the grey literature contends that how one communicates a message is nearly equally important as the message content itself.

When Nina Pham contracted Ebola after caring for Thomas Eric Duncan, a wave of fear swept the United States. Had communications been handled better, more in line with the best practices of risk communication, most of this fear could have been avoided. Two risk communication errors were made. First was the failure to communicate openly: no mention was made of the fact that Personal Protective Equipment (PPE) protocol had been breached. Second, scientists failed to communicate clearly about true risk levels facing average Americans at that point in time. Rather than clearly enunciating that no single case of Ebola had been transmitted by asymptomatic infected persons or by aerosol transmission, answers to such questions hedged on the one hand (asymptomatic cases) and speculated on the other (aerosol transmission). A frank answer that chances of such kinds of transmission were as near zero as is possible to get would have been better (86). Sources concurred that if uncertainties exist, they need to be admitted openly (13, 18, 21).

Conversely, the CDC's first communications expressed great confidence that there was no risk of American health workers contracting the disease. This over-confidence gave the impression of more certainty about Ebola than actually existed. It also ignored or silenced other, more cautious voices in the medical community, pretending to a consensus that did not exist (83). This violated one of the cardinal rules of communicating uncertainty: Admit it (18, 21, 83).

Another lesson about communicating uncertainty came from the messages concerning Ebola and the consumption of bush meat. Initially messages warning against touching dead bodies or body fluids and against eating bush meat were presented as equally important. Later the bush meat messages were discontinued, yet no explanation of this change was made (46, 47). This was counter to another principle of risk communication: If something uncertain has been communicated as certainty and then discovered to be incorrect, acknowledge and clarify the error.

In summary, when uncertainties exist, they need to be admitted openly and frankly.

A total of eight documents were identified as relevant to communicating uncertainties, one source was of low credibility, three of moderate, and four of high.

Q12: What elements and timing of messages are best at influencing public/community levels of concern to motivate relevant actions to protect health?

Twenty-one documents contained evidence pertinent to the question of message elements and timing that are best at motivating behaviour change, 12 from moderately and nine from highly credible sources. Of these, seven were Knowledge, Attitude, Practice (KAP) studies. Although their findings are relevant to their particular outbreak in their particular location, they are not necessarily generalizable. As such they are not discussed here.

The grey literature found that uptake of protective health messages was impacted by a number of different factors. One was where the messages were placed. It is critically important to know where people get their health information (85). Without this, even the best-crafted message may be wasted by placing it where it will not be noticed. This should be assessed by target group, as media consumption varies greatly. Nor was the message medium the only concern.

Sources' credibility and trustworthiness also impacted the adoption of behaviour changes. Several documents found that invoking credible sources (18, 21, 87), or the opinions of trusted community leaders, family members or friends could influence behaviour changes (49). Use of survivor numbers and stories also encouraged behaviour uptake (20). One report noted that if experts were used, reference must also be made to their trustworthiness (21).

One document stated that information about risks needs to be communicated promptly so that people have time to make informed choices. It also should take place while debate is on-going. If one waits until a situation calms down, public attention will wander elsewhere. It also found that repeating messages frequently facilitates uptake (18).

Communities were more likely to accept and act on messages when the messages were practical (42) and tailored to their culture and circumstances (18, 20, 42, 43, 63), and when they had participated in the messages' development (42, 63). The uptake effect was amplified still more when the community assessed the outbreak themselves (43). A two-way process of communication and feedback increased messages' effectiveness, as did responding to people's fears (18, 21, 36, 42). One report emphasized that special focus should be directed to minority populations (18).

Two studies found that inconsistencies breed mistrust. If messages change over time, the reasons for the changes must be explained and puzzling elements clarified (18, 46). Communications need to be candid, open and honest and uncertainties need to be acknowledged (18, 21). Clear distinction should be made between messages that are evidence based, and those that are less certain (36). Messages should be coordinated (36) and communicate confidence while allowing for improved knowledge and changing circumstances (18, 21). Their effectiveness should be continually monitored so they may be improved and adapted as needed (66).

Capturing the imagination with story-telling and drama was also found to improve message uptake and implementation (36, 42).

The tone of messages was also found to be important. Messages needed to convey compassion, concern, empathy (18, 21), and self-efficacy (18, 21, 36, 49). They needed to be phrased in clear, non-technical language, preferably the local language. They should clearly state who should do what, where, when, how and why (18). Messages need to be framed in terms of the values of those who oppose the desired behaviour change. Opposition strong points should be worked into messages, along with appreciation of different points of view (18).

Finally, it was found that messages need to clearly state what the difference is between the crisis situation and a normal one (52). They also need to address perceived norms and positive and negative consequences (49).

7. Conclusion

Although yielding only sparse results in terms of studies and hard data, this rapid review of grey literature provided a wealth of contextualizing information, particularly in relation to community

engagement, trust-building and message content. It also contributed background to interagency coordination, staff capacity and communicating uncertainties. The lack of results found for some questions, such as the integration of risk communication into national health plans, and sources of sustainable financing for risk communication, indicate a need for further implementation and documentation to feed back into the research process. At least in regards to sustainable funding for risk communication, progress appears to have been made: Several documents indicated that risk communication is now being allocated dedicated funding by some programmes. Although this does not represent sustainable funding yet, it still is a step in the right direction. The same holds true for community engagement and other aspects of risk communication. The literature indicates movement toward greater recognition of this vitally important element of public health.

8. Limitations

This rapid review of grey literature sources for evidence to underpin the risk communications guideline was limited by three things: language, access and time. Each is addressed separately below.

Although no documents were excluded based on language, nevertheless language limited this search. Databases and websites were searched using search terms in English, something which already biases results in favour of English-language texts. Five non-English documents were received from expert sources, three in Portuguese and two in Spanish. Since these languages do not fall within the competency of the searcher, the expert team requested native-speaker colleagues to briefly review them for inclusion or exclusion. The documents were not translated, however those reviewing them wrote brief explanations of their content. Based on these notes and the reviewers' recommendations, four of these documents were included in the search results. Because full translations were not available, the searcher did not evaluate these documents against either AACODS or CASP criteria, nor were they mined for inclusion in the narrative report. Citations for these four documents appear in Appendix 2, below. There was insufficient time to appraise the methodological strengths and limitations of cross sectional survey data.

The search was also constrained by time limits. Grey literature encompasses vast quantities of material. In view of this, the decision was made to allot a fixed amount of time to the search and to focus on the most promising and richest sources. Evidence processing was generally undertaken by one person with some limited double checking by team members. Key decisions were undertaken by consensus in virtual team meetings.

Finally, the search was restricted to publically-available databases (free access).

Appendix 1 Search terms and results by database

The tables below present keyword search terms used and results returned by database.

Greylit.org

Keyword	Results returned	Included
Risk communication	9	0
Disaster	64	8
Social media	9	0
Uncertainty	5	0
Communication fund*	21	1
Communication finance*	7	1
Ebola	70	49
Advocacy	17	0
Budget	22	0 new (1 redundant)
Catastrophe communication	1	0
Catastrophe	6	0
Communication	94	4 new (many redundant)
Cell phone	2	0
Civil defence	8	3 (2 from bibliographies)
Communicating uncertaint*	0	
Communication plan	18	0 new (some redundant)
Community acceptance	1	0 new (redundant)
Community compliance	0	
Community engagement	42	1
Community motivation	4	0 new (1 redundant)
Community participation	32	0 new (1 redundant)
Computer mediated communication	0	
Credibility	0	
Crisis	34	0 new (redundant)
Crises	8	0 new (redundant)
Cyclone	1	1
Disaster plan	17	1 new (redundant)
Disaster preparedness	48	4 new, some links, redundant
Disaster	64	0 new (redundant)
Disease outbreak	39	0 new (redundant)
Earthquake	1	0
Electronic communication	2	0
Emergency	116	4 new (redundant)
Emergency communication	39	0 new (redundant)
Emergency management	17	0 new (redundant)
Emergency planning	30	0 new (redundant)
Emergency preparedness	54	0 new (redundant)
Epidemic	34	0 new (redundant)
Facebook	0	
Financing	48	0 new (redundant)
Flood	1	0
Risk communication funding	4	1
Communication funding	21	0 new (redundant)
Mobilization funding	5	0 new (redundant)
Awareness funding	3	0
Preparedness funding	45	0 new (redundant)

Funding	241	0 new (redundant)
Governance	138	2 new (redundant)
Government	138	0 new (redundant)
Hazard communication	2	0 new (redundant)
Hazard	6	0 new (redundant)
Health alert	1	0 new (redundant)
Health announc*	4	0
Health authorities	38	0 new (redundant)
Health campaign	14	0 new (redundant)
Health communication	85	0 new (redundant)
Health protection info*	25	0 new (redundant)
Health recommendations	64	0 new (redundant)
Human influenza	72	0 new (redundant)
Hurricane	1	0
Information dissemination	0	
Interpersonal communication	0	
Journalism	41	0 new (redundant)
Mass media	5	0
Media	24	1 new (redundant)
Medical information	47	1 new (redundant)
Messages	7	0
Mitigation	18	0 new (redundant)
Mobile	15	0 new (redundant)
Motivation	9	0 new (redundant)
Multimedia	0	
Natural disasters	4	0
News media	3	0
New media	8	0 new (redundant)
News	47	0 new (redundant)
Organizational communication	0	
Outbreak	43	0 new (redundant)
Pandemic	25	0 new (redundant)
Preparedness	59	0 new (redundant)
Public awareness	8	0
Public notice	2	0
Public participation	41	0 new (redundant)
Risk communication	9	0 new (redundant)
Risk management	16	0 new (redundant)
Risk reduction behavior	1	0
Risk	106	0 new (redundant)
Public health	380	0 new (redundant)
Public information	140	0 new (redundant)
Safety	139	0 new (redundant)
SMS	0	
Social media	9	0
Spokesperson/people	0	
Staff capacity	2	0 new (redundant)
Staff development	9	0
Staff retention	0	
Telecommunications media	0	
Text message	0	
Texting	5	0
Threat	32	0 new (redundant)

Timing	121	0 new (redundant)
Trust	75	0 new (redundant)
Tweet	0	
Twitter	1	0
Warning	5	0 new (redundant)
Zika	21	0 new (redundant

Worldcat.org

Advocacy Education 58 Sociology 10 Medicine 7 Political science 7 Hlth prof/pub hlth 2 Comm. Disease 1	470	(first 50 nothing relevant) 0 0 0 0 0 0
Awareness Education 232 Medicine 94 Sociology 51 Psychology 28 Political science 7 Anthropology 5 Hlth prof/pub hlth 3 Biological science 2 Med by discipline 1	3028	(first 100 nothing relevant) 0 0 1 0 0 0 0 0 0 0
Ebola	107	2

Opengrey.eu

Advocacy	0	
Awareness	0	
Budget	0	
Catastrophe communication	0	
Cell phone	0	
Ebola	0	
Civil defence	0	
Communicating uncertainties	0	
Communication	0	

Note: Searches yielded results only up through 2012. I have asked Tomas if Opengrey stopped updating at that point, because if so, this would place it outside our scope in terms of time (2015-2016).

Evidenceaid.org

Advocacy	2	0
Awareness	0	
Budget	0	
Catastrophe communication	In process	• 1 potentially relevant study in process • Links to other sites that might have relevant documents

Note: Evidenceaid does not list the total number of retrieved documents. It also breaks them up into different categories. This makes presenting a total number of hits difficult. For this reason, it has been omitted.

Disasterlit.nlm.nih.gov

Ebola communication	40	7

Zika communication	5	1
Zika risk communication	35	0
Risk communication	35	0
Risk communication AND Ebola	5	0

Appendix 2 Other UN language documents

Condore, N. (2016). INFORME:
ELABORACIÓN DE LA LÍNEA DE BASE SOBRE EL NIVEL DE CONOCIMIENTO DEL ZIKA EN LAS POBLACIONES DE LORETO Y AMAZONAS

The results from a survey determine the knowledge of two communities in Peru about Zika. It includes results and conclusions from the survey: that lack of knowledge was causing fear, that the population confounded Zika and other diseases, that community leaders needed information to share with other who were looking to them for info, and the different media that were of use (some communities preferred radio, others TV).

Fsbpesquisa (2016). Pesquisa com correspondentes, Fsbpesquisa.

How international correspondents (journalists) understand and assess the *Aedes* related outbreaks and what's their opinion about the governments, who's guilty, how much they know about the diseases transmitted and the campaigns, how they assess the Ministry of Health's communications tools etc... It's got a lot of details about the journalists' profiles.

Fsbpesquisa (2016). Pesquisa com journalistas, Fsbpesquisa.

How Brazilian journalists (by state) understand and assess the *Aedes* related outbreaks and what's their opinion about the governments, who's guilty, how much they know about the diseases transmitted and the campaigns, how they assess the Ministry of Health's communications tools etc... It's got a lot of details about the journalists' profiles.

Pequisa CNT (2016). Pequisa CNT/MDA: Relatoria Sintese, Pequisa CNT.

Translator's note: It has a lot of data on Brazilians perception of politics and Brazil's situation in February 2016. It seems really old, because it was before the president Dilma's impeachment. But from page 35 to 39, there are data about people who were infected by Zika virus, percentage of people who had been taking measures to protect themselves from *Aedes*, who's to blame for the outbreak etc... That might be interesting to compare with nowadays or other countries

NOTE: Survey results indicate that 85% of respondents indicated they'd changed a behaviour to avoid mosquitoes & disease. 93% have tried to eliminate breeding sites around the house and 30% use repellent.

Appendix 3 AACODS Tool

AACODS		YES	NO	?
Authority	Identifying who is responsible for the intellectual content. **Individual author:**			
	• Associated with a reputable organisation?			
	• Professional qualifications or considerable experience?			
	• Produced/published other work (grey/black) in the field?			
	• Recognised expert, identified in other sources?			
	• Cited by others? (use Google Scholar as a quick check)			
	• Higher degree student under "expert" supervision?			
	Organisation or group: • Is the organisation reputable? (e.g. W.H.O)			
	• Is the organisation an authority in the field?			
	In all cases: • Does the item have a detailed reference list or bibliography?			
Accuracy	• Does the item have a clearly stated aim or brief?			
	• Is so, is this met?			
	• Does it have a stated methodology?			
	• If so, is it adhered to?			
	• Has it been peer-reviewed?			
	• Has it been edited by a reputable authority?			
	• Supported by authoritative, documented references or credible sources?			
	• Is it representative of work in the field?			
	• If No, is it a valid counterbalance?			
	• Is any data collection explicit and appropriate for the research?			
	• If item is secondary material (e.g. a policy brief of a technical report) refer to the original. Is it an accurate, unbiased interpretation or analysis?			
Coverage	All items have parameters which define their content coverage. These limits might mean that a work refers to a particular population group, or that it excluded certain types of publication. A report could be designed to answer a particular question, or be based on statistics from a particular survey. • Are any limits clearly stated?			
Objectivity	It is important to identify bias, particularly if it is unstated or unacknowledged. • Opinion, expert or otherwise, is still opinion: is the author's standpoint clear?			
	• Does the work seem to be balanced in presentation?			
Date	For the item to inform your research, it needs to have a date that confirms relevance • Does the item have a clearly stated date related to content? No easily discernible date is a strong concern.			
	• If no date is given, but can be closely ascertained, is there a valid reason for its absence?			
	• Check the bibliography: have key contemporary material been included?			
Significance	This is a value judgment of the item, in the context of the relevant research area • Is the item meaningful? (this incorporates feasibility, utility and relevance)			
	• Does it add context?			
	• Does it enrich or add something unique to the research?			
	• Does it strengthen or refute a current position?			
	• Would the research area be lesser without it?			
	• Is it integral, representative, typical?			

Appendix 4 – Summary of the evidence by question

Q1: How can emergency risk communication best be integrated into national leadership planning and execution for events and emergencies with public health implications?

National Academy of Medicine (2016). The Neglected Dimension of Global Security: A Framework to Counter Infectious Disease Crises, National Academies Press**:** 144, from https://www.nap.edu/catalog/21891/the-neglected-dimension-of-global-security-a-framework-to-counter.

> Building and sustaining strong health systems is achievable with leadership and commitment, at the national, provincial, and local levels, even in relatively poor countries. Countries like Uganda have demonstrated that creating resilient and effective public health systems that can identify and contain infectious disease outbreaks is not beyond reach. What is required is leadership. Governments must recognize that protecting against the threat of infectious disease is a fundamental part of their basic duty to protect their citizens.
>
> Building effective public health systems requires more than surveillance systems, laboratory networks, and clinical capabilities. Engaging and communicating with communities is critical. Community awareness enhances surveillance. Trust and cooperation of the local population is a vital component of any response strategy.
>
> Credibility: High

United States Department of Health and Human Services and Office of the Assistant Secretary for Preparedness and Response (2016). U.S. Department of Health and Human Services Ebola Response Improvement Plan, from https://www.phe.gov/Preparedness/responders/ebola/Documents/EbolaIP.pdf.

> 4. Risk Communication
> To strengthen risk communications, HHS will:
> 4.1 Develop/codify a Department-wide strategy for communicating risk information to the public during any domestic or international public health emergency, urgent health threat, or health-related incident that may be perceived to pose a significant risk to healthcare providers or the public. The framework should institutionalize the use of crisis and emergency risk communication principles. [Office of the Assistant Secretary for Public Affairs (ASPA), CDC]
> 4.2. Identify and train a cadre of personnel from across HHS that have public health expertise and a thorough understanding of, and fluency in, health crisis and risk communications to serve as spokespersons during domestic or international public health and medical emergencies. This training can draw upon a body of work developed since the 9/11 terrorist attacks. [ASPA]
> 4.3. Develop a mechanism to augment steady state crisis and risk communication staff as needed. [ASPA, CDC]
>
> Credibility: Moderate

Sugg, C. (2016). "Coming of age: communication's role in powering global health." Retrieved 4 Jan 2017, 2017, from http://downloads.bbc.co.uk/mediaaction/policybriefing/role-of-communication-in-global-health-report.pdf.

> This critical interplay between human health and communication has now been recognised in assorted global and national health policies on paper. However, when it comes to funding allocation and the ways in which health programmes are implemented on the ground, clear deficits can be seen. Too often, health communication is poorly funded, under-utilised and badly planned, bolted on to programmes as an apparent afterthought. This needs to change if

progress towards a healthier world is to be accelerated.

Part 4 examines the reasons for the ongoing under prioritisation of health communication and identifies promising attempts to bring it more firmly into the heart of public health practice.

NOTE: Recommendations include making social and behavioural change communication an integral part of health programs, using longer-termed, multi-pronged approaches; increased funding for SBCC research - make sure lessons learned are compiled and applied; create an institutional "home" for health communication; and increase health communication capacity in governments & civil society organizations.

Credibility: High

United Nations General Assembly (2016). "Protecting humanity from future health crises: Report of the High-level Panel on the Global Response to Health Crises." Retrieved 4 Jan 2017, 2017, from http://www.un.org/ga/search/view_doc.asp?symbol=A/70/723.

The Panel has made 27 recommendations for action at the national, regional and international levels, including many measures that cut across governance levels and require engagement with all sectors of society. While complex, there are a few concrete actions that can be taken immediately that will involve partners from governments, international institutions, civil society, and the private sector all working together with a newfound urgency. These priority actions will begin to build the global capacity required to manage future health crises and accelerate the implementation of the Panel's recommendations.

Secondly, all countries must meet the full obligations of IHR. Where capacities are lacking, support should be provided to urgently implement a core set of measures. These measures should be under the direct authority of the Heads of Government and should include the establishment of pandemic preparedness and response mechanisms, with clear command and control; hiring and training health professionals and community health workers; and building a comprehensive surveillance system with a national laboratory.

NOTE: The recommendations specifically mention community engagement. They also deal with coordination at all levels and financing of response efforts, including funding for preparedness, although specific risk communication funding is not mentioned.

Credibility: High

Q2: What are the best types of mechanism(s) to establish effective, cross-jurisdictional linkages for information sharing for emergency risk communication and internal coordination?

Bristol, N. and C. Millard (2015). "The power of straight talk: The Independent Monitoring Board of the Global Polio Eradication Initiative." Retrieved 12 Dec 2016, 2016, from https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/publication/150921_Bristol_PowerStraightTalk_Web.pdf.

Document primarily discusses the Independent Monitoring Board (IMB) of the GPEI - why it was established, what it has done and with what success. It finds that the IMB model could prove useful if the board had strong leadership, and clear targets against which to evaluate progress, if it were willing to speak frankly about program short-comings, and if the programs it monitored were open to constructive criticism.

Perhaps also of interest as a case study of one option for coordinating across countries and agencies.

Credibility: Moderate

Bristol, N. and C. Millard (2016). "Bolstering public health capacities through global polio eradication: planning transition of polio program assets in Ethiopia." Retrieved 12 Dec 2016, 2016, from https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/publication/160215_Bristol_BolsteringPubHealthEthiopia_Web.pdf.

Mentions that former polio funding should support social mobilization for health education. Also mentions advocacy and using community volunteers for health education. Relationships with local community structures listed as one of the most valuable assets of the program. Another major program asset is listed as cross-border meetings and synchronization, though details of these are not provided.

Credibility: Moderate

Miller, L., et al. (2016). "The Ebola Lessons Reader: What's being said, what's missing and why it matters ". from https://www.rescue.org/sites/default/files/document/563/theebolalessonsreaderlowres.pdf.

Discusses the role of WHO and other organizations in responding to out outbreak, noting that WHO's mandate is that of norm-setting, coordinating agency. Whether it was intended to be or should be an operational agency is still an unanswered question.

Credibility: High

United Nations General Assembly (2016). "Protecting humanity from future health crises: Report of the High-level Panel on the Global Response to Health Crises." Retrieved 4 Jan 2017, 2017, from http://www.un.org/ga/search/view_doc.asp?symbol=A/70/723.

First, WHO must build a new centre for emergency preparedness and response and ensure that the world has a standing capacity to immediately identify and respond to emerging communicable disease threats. The centre must have real command and control capability, access to specialized human and operational resources to execute a health response, and the ability to visualize and share validated surveillance data in real time. The centre should benefit from the best technology available to ensure the global community can identify, track and respond effectively to any emerging threat.

Credibility: High

World Health Organization (2015). "Advisory Group on Reform of WHO's Work in Outbreaks and Emergencies, First Report, November 15th 2015." Retrieved 3 Jan 2017, 2017, from http://www.who.int/about/who_reform/emergency-capacities/advisory-group/first-report.pdf?ua=1.

1. The Advisory Group acknowledges that at all times WHO is committed to the "attainment by all peoples of the highest possible level of health". A core component of this objective is WHO's mandate to provide technical assistance and aid in emergencies. This mandate is expressly set out in Article 2(d) of the Organization's Constitution and has been recognized in numerous resolutions of the World Health Assembly.1

2. To fulfil this mandate, WHO needs sufficient operational capability to lead and support preparations for, and responses to, both outbreaks and emergencies with health and humanitarian consequences. In these situations, WHO must exercise decisive leadership on the health aspects of the response, while – at the same time - supporting national authorities and operating as one partner alongside other international and local actors for health. Each of these have their own responsibilities and expertise in the different aspects of the work in outbreaks and emergencies.

3. WHO is expected to demonstrate that it is an independent and impartial institution that gives priority to the health and well-being of all people, especially those who are vulnerable. Article 37 of the WHO Constitution stipulates that in the "performance of their duties the Director-General and the staff shall not seek or receive instructions from any government or from any authority external to the Organization… Each Member of the Organization on its part undertakes to respect the exclusively international character of the Director-General and the staff and not to seek to influence them." Independence and impartiality underpin WHO's mandate and are expected of WHO staff at all levels. These fundamental principles should be made much more explicit both in all work undertaken throughout the Organization and in all its external communications.

4. The Advisory Group recommends the expansion of the current Emergency Response Framework to cover all phases of the emergency management cycle – preparedness, alert, response, recovery and prevention. The Framework should incorporate six critical functions that WHO must address when working on outbreaks and emergencies – (i) leadership for the health of all people; (ii) engagement with political leaders (when necessary, beyond the Minister for Health); (iii) coordination (iv) scientific and technical expertise (backed by research and development); (v) information and communications; and (vi) facilitation of access to essential health services for people whose urgent needs are not being met by any other provider.

Credibility: High

World Health Organization (2015). "Ebola Virus Disease Preparedness: Taking Stock and Moving Forward." Retrieved 30 Nov 2016, 2016, from https://extranet.who.int/iris/restricted/bitstream/10665/152132/1/9789241508421_eng.pdf.

The meeting identified both immediate and long term needs in the 14 high-priority countries. Immediate actions for EVD preparedness, and the continuing development of IHR capacities and health systems strengthening were discussed. Adherence to the principles of International Health Partnerships and the contribution of partners to both the response and to preparedness is essential.

Specific issues included the need for cross border coordination of activities between the three affected countries and their neighbours; better coordination among partners supporting national plans of action; stronger community engagement in the process of preparedness and response; as well as the lack of capacities for alert and detection of potential cases. At the same time, representatives of the countries covered in this meeting outlined some of the challenges they face including the competing interests of on-going disease outbreaks and humanitarian crises, financial gaps and insecurity.

Credibility: Moderate

World Health Organization (2015). "WHO strategic response plan, West Africa Ebola Outbreak." Retrieved 1 Dec 2016, 2016, from http://apps.who.int/iris/bitstream/10665/163360/1/9789241508698_eng.pdf.

Bordering countries
The first priority is to ensure Ebola operations centres and incident management systems are in place in the four bordering countries: Côte d'Ivoire, Guinea-Bissau, Mali and Senegal. Enhanced surveillance, early warning systems and response in these countries will be integrated into the health system and further strengthened through active and community-based surveillance.

The communication of risk needs to be done in line with risk assessment and risk mitigation strategies in tandem with community engagement strategies. National communication strategies need to inform and engage the public in ways that build trust, and provide relevant information on the Ebola outbreaks in neighbouring countries in addition to engaging communities in measures to reduce the risk of exposure. Rapid response capacities and isolation units where any suspect Ebola case can be properly investigated need to be available as well as processes for rapidly shipping diagnostic specimens to a WHO-recognized laboratory.

Particular attention will be paid to ensure agreements and standard operating procedures between internationally bordering districts are established to outline mechanisms for sharing information, diagnostic capacity, facilities, logistics, human resources and training. WHO will continue to ensure the availability of experts in case management, infection prevention and control, surveillance and community engagement in these bordering countries to ensure rapid response if and when required.

Credibility: Moderate

World Health Organization (2016). "Implementation of the International Health Regulations (2005): Report of the Review Committee on the Role of the International Health Regulations (2005) in the Ebola Outbreak and Response." Retrieved 4 Jan 2017, 2017, from http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_21-en.pdf.

Recommendations
12. Our recommendations are organized into two groups: (i) a strategy to ensure implementation of the IHR based on new proposals (Recommendations 1–6); and (ii) improved delivery of the IHR by reinforcing existing approaches in IHR implementation (Recommendations 7–12). The following headline recommendations are supported by detailed recommendations addressed to WHO, States Parties and other stakeholders.

1. Implement rather than amend the IHR
There is neither the need for, nor benefit to be drawn from, opening up the amendment process for the IHR, at this time.

2. Develop a Global Strategic Plan to improve public health preparedness and response
The WHO Secretariat should lead the development of a Global Strategic Plan to improve public health preparedness, in conjunction with States Parties and other key stakeholders, to ensure implementation of the IHR, especially the establishment and monitoring of core capacities. The Global Strategic Plan should inform the development of regional office and national plans.

7. Enhance compliance with requirements for Additional Measures and Temporary Recommendations
States Parties should ensure that the public health response measures they implement comply with the IHR. To this end, WHO should increase transparency about Additional Measures adopted by States Parties, and publicity about Temporary Recommendations, and develop partnerships with international travel and trade organizations, and engage

with other relevant private stakeholders.

8. Strengthen National IHR Focal Points
National IHR Focal Points should be centres with sufficient staff with experience, expertise and seniority, and should be supported with the required resources (administrative, logistical and financial) to carry out all of their mandatory coordination and communication functions – as well as any other functions assigned by the State Party.

11. Improve rapid sharing of public health and scientific information and data
WHO champions the open sharing of information on public health risks, and expands guidance on global norms for sharing data to biological samples and gene sequence data during public health emergencies.

WHO and States Parties should ensure that sharing of samples and sequence data is balanced with benefit-sharing on an equal footing.

12. Strengthen WHO's capacity and partnerships to implement the IHR and to respond to health emergencies WHO's ability to implement the IHR is strengthened through Secretariat reform and stronger partnerships, and significantly increased financial support from States Parties and other key stakeholders.

NOTE: Committee finds that the problem is not the IHR themselves, but the fact that they have not been implemented.

Credibility: HIGH

World Health Organization (2016). "Second Report of the Advisory Group on Reform of WHO's Work in Outbreaks and Emergencies." Retrieved 3 Jan 2017, 2017, from http://www.who.int/about/who_reform/emergency-capacities/advisory-group/second-report.pdf?ua=1.

1. WHO's Member States and their people expect the Organization to provide leadership, support and expertise when public health is threatened by outbreaks and emergencies. WHO's mandate for working in outbreaks and emergencies must be reflected in every aspect of the Organization – its planning and budgeting, the capabilities of its staff and the focus of its governing bodies. This mandate is at the heart of WHO's identity.

2. In its work in outbreaks and emergencies, WHO has been regarded as insufficiently engaged on the ground, slow to deploy in crises, lacking in independence, overly political and poor at working in partnership with others. WHO must change these perceptions and improve its performance in order to restore public trust and confidence in the Organization's ability to deliver on its mandates. In its work on outbreaks and emergencies, WHO must demonstrate that it is an independent and impartial institution that gives priority to the health and well-being of all people, especially those who are vulnerable.

NOTE: Document presents further recommendations regarding WHO and its role in health emergencies. These pertain to its organization, its role in coordinating and back-stopping responses, etc.

Credibility: High

Q3: How to best develop and sustain emergency risk communication staff capacity for preparedness and response?

Adams, V., et al. (2016). "OCB Ebola Review: Summary Report." Retrieved 12 Jan 2017, 2017, from http://cdn.evaluation.msf.org/sites/evaluation/files/attachments/ocb_ebola_review_summary_report_final_3.pdf.

LESSON LEARNED: Where community fears of a disease are high, and acceptance of an intervention is at stake, MSF must integrate dedicated staff for local communications from the very beginning of a response. A proper analysis of the cultural understanding, needs and dynamics must take place and strategies be developed accordingly and in good interaction with health promotion.

LESSON LEARNED: Advocacy needs in (large scale) emergencies can only be appropriately covered if sufficient advocacy and communications resources based on longer term assignments are available early on, both at HQ and field levels. In the field capacity it is particularly key to have capacity for analysis and documentation that will feed the Task Force.

Credibility: Moderate

Bastide, L., et al. (2015). Generating evidence by capturing field experience from WHO-led deployments of risk communication experts to West Africa. Geneva, Geneva School of Social Sciences, Department of Sociology.

NOTE: Document captures experiences & lessons learned from ECN deployees from the West African Ebola outbreak. Identifies challenges faces and skills needed to address them. Two key findings were the need to be able to improvise and the need to take on different roles, sometimes including ones outside one's comfort zone.

Findings are presented along three areas. A first section describes the individual capacities and capabilities of ECN deployees. A second section concentrates on the performances of the ECN as an organization during the EVD crisis; thus, collective capabilities are identified. In a third section, possible improvements to the ECN, both in terms of training and deployment are proposed based the lessons drawn from these findings.

Credibility: High

Denney, L., et al. (2015). "After Ebola: why and how capacity support to Sierra Leone's health sector needs to change ". Retrieved 5 Dec 2016, 2016, from http://www.securelivelihoods.org/resources_download.aspx?resourceid=362&documentid=457.

NOTE: Mentions need for staff training/development of softer communication and interpersonal skills to help build trust.

Credibility: High

Fielding, J., et al. (2016). "Report of the Independent Panel on the U.S. Department of Health and Human Services (HHS) Ebola Response." from https://www.phe.gov/Preparedness/responders/ebola/EbolaResponseReport/Documents/ebola-panel.pdf.

• HHS should identify and train a cadre of personnel from across HHS to be potential spokespersons during public health and medical emergencies. These personnel should have public health expertise and a thorough understanding of health crisis/risk communication. They should receive training in these concepts annually, at a minimum. (Finding #5)

Credibility: High

Health Communication Capacity Collaborative (2016). "HC3 Landscaping Summary Report on Zika Coordination and Communication in Four Countries: Honduras, El Salvador, Dominican Republic and Guatemala, March – April 2016." from http://www.zikacommunicationnetwork.org/sites/default/files/resource_files/Zika-Summary-Report-FINAL-03Aug2016.pdf.

NOTE: Document reports on current state of communication around Zika, notes what messages need to be focused on, mentions social media and coordination between different organizations. Also notes the need to train outreach workers in communication skills and messages. Mentions the need to keep the press informed and help shape their communications around Zika as well.

Credibility: High

Modarres, N. (2015). "Community Perspectives about Ebola in Bong, Lofa and Montserrado Counties of Liberia: Results of a Qualitative Study ". from http://ebolacommunicationnetwork.org/wp-content/uploads/2015/02/Liberia-Ebola-KAP-study_Research-Report_FINAL_10-Feb-2015.pdf.

NOTE: Preparedness training, including risk communication, recommended as pre- or in-service training for health workers in Liberia.

Credibility: Moderate to high (some but limited interaction with literature)

Peremans, M. (2016). "OCB Ebola Review Part 4: Advocacy & Communication." Retrieved 12 Jan 2017, 2017, from http://cdn.evaluation.msf.org/sites/evaluation/files/attachments/ocb_evaluation_ebola_advocacy_final_0.pdf.

Advocacy needs in (large scale) emergencies can only be appropriately covered if sufficient advocacy and communications resources based on longer term assignments are available early on, both at HQ and field levels. In the field capacity it is particularly key to have capacity for analysis and documentation that will feed the Task Force.

Credibility: CASP - High; AACODS: Moderate - due to inability to review information sources

Quinn, M., ed, (2016). "Governance and Health in Post-Conflict Countries: The Ebola Outbreak in Liberia and Sierra Leone." Retrieved 1 Dec 2016, 2016, from https://www.ipinst.org/wp-content/uploads/2016/06/1606_Governance-and-Health.pdf.

- Build national capacities to detect and respond quickly to health emergencies;
- Build personnel capacity, particularly in rural areas

Credibility: Moderate

Savoia, E. and K. Viswanath (2015). "RICE – RIsk Communications Evaluation." from https://www.yumpu.com/en/document/view/31171296/rice-risk-communications-evaluation/6.

Risk communication capacity should be based at each “geographic” level, local, national, regional and global, with clearly defined roles, responsibilities and infrastructure. The presence or absence of a risk communication plan does not necessarily indicate capacity, nor do elements of infrastructure indicate operational capabilities. Monitoring and evaluation were considered critical components of a capacity building program, as were the completion of a consensus program and the preparation and testing of a corresponding document.

Credibility: High

Schoch-Spana, M., et al. (2016). "How to Steward Medical Countermeasures and Public Trust in an Emergency – A Communication Casebook for FDA and Its Public Health Partners ". from http://www.upmchealthsecurity.org/our-work/pubs_archive/pubs-pdfs/2016/MCMCommCasebookJune102016.pdf.

Train agency spokespersons to recognize variables known by risk communicators to provoke public outrage including perceived unfairness, moral indifference, and impacts on vulnerable populations. When these elements are present in a situation, recognize that they are central to public health objectives rather than dismiss them as mere misperceptions. Instead, openly acknowledge these concerns and use values-based language with supporting evidence to diminish impassioned critiques, direct or indirect, of agency policies and actions.

Credibility: High

Sugg, C. (2016). "Coming of age: communication's role in powering global health." Retrieved 4 Jan 2017, 2017, from http://downloads.bbc.co.uk/mediaaction/policybriefing/role-of-communication-in-global-health-report.pdf.

A further important step in building the health communication field will be giving greater prominence to health communication capacity strengthening – particularly in government health agencies and civil society organisations. The health communication sector would benefit from agreeing key milestones and measures of success, and showing greater commitment to this area. Further integration of health communication in academic public health programmes and other university courses should be an area of greater focus in coming years.

NOTE: Mentions that health communication capacity building for local health agencies and personnel has long been neglected.

Credibility: High

Turner, M. M., et al. (2016). "Ebola risk communication project in Liberia: Lessons in crisis communication." from http://healthcommcapacity.org/wp-content/uploads/2016/09/GW-Report-Ebola-Risk-Communication-Project-LIberia_Lessons-in-Crisis-Communication1.pdf.

Train media personnel, especially radio, in public crisis communication.
Credibility: High

World Health Organization (2015). "WHO Emergency Reform Workshop report: Emergency Risk Communication." from http://www.who.int/about/who_reform/emergency-capacities/who-er-consultation-24-25-nov-2015.pdf?ua=1.

The failure to develop local risk communication capacities has led to reliance on outside experts being brought in in times of crisis. Focus needs to be on developing national capacities (14).

Twelve functions were identified for risk communication capacity building. The top three of these were strategic communication strategies, plans and standards of practice; trust building strategies and activities; and coordination skills and capacity. Others included stakeholder and partner communications, community engagement, socio-political, economic and cultural analysis for risk communication, and translational communication of technical expertise into understandable, contextualized material (14)

Credibility: Moderate

Q4: How to ensure sufficient and sustainable financing for emergency risk communication?

Assessment Capacities Project (ACAPS) (2015). "Ebola Outbreak, Liberia: Communication: Challenges and Good Practices." from https://www.acaps.org/sites/acaps/files/products/files/u_liberia_communication_challenges_and_good_practices_dec_2015-ilovepdf-compressed_ul.pdf.

Key findings:
+ Funding for social mobilisation activities and focus on "bottom-up" community led-engagement campaigns came too late. These should have started at the onset of the emergency.

Credibility: High

Assessment Capacities Project (ACAPS) (2015). "Ebola Outbreak, Sierra Leone: Communication: Challenges and Good Practices." from https://www.acaps.org/sites/acaps/files/products/files/v_sierra_leone_communication_challenges_and_good_practice_dec_2015_2-ilovepdf-compressed_ul.pdf.

Lessons learned:
Timing: For many KIs, funding for social mobilisation and focus on "bottom-up" activities came too late (PI, 28/10/2015, PI, 18/10/2015, PI, 07/09/2015, 25/11/2015).

Credibility: High

Bristol, N. and C. Millard (2016). "Bolstering public health capacities through global polio eradication: planning transition of polio program assets in Ethiopia." Retrieved 12 Dec 2016, 2016, from https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/publication/160215_Bristol_BolsteringPubHealthEthiopia_Web.pdf.

Mentions that former polio funding should support social mobilization for health education.

Credibility: Moderate

De Roeck, D. (2016). "Guidance Note on the Use of Oral Cholera Vaccines." from http://www.plateformecholera.info/attachments/article/286/Guidance%20Note%20on%20the%20Use%20of%20Oral%20Cholera%20Vaccines%20-%20FULL%2042616.pdf.

NOTE: Discusses financing for the OCV program, but does not discuss risk communication funding specifically. Contains many useful links.

Credibility: High

Frontline Health Workers Coalition (2015). "Costs of scaling up the health workforce in Liberia, Sierra Leone, and Guinea amid the Ebola epidemic." Retrieved 5 Dec 2015, 2016, from https://www.frontlinehealthworkers.org/wp-content/uploads/2015/03/WAfricaCosting.pdf.

Does NOT address risk communication directly. Does provide a detailed breakdown of the cost of improving staff capacity in the 3 hardest hit countries, including establishing an adequate CHW program. Since CHWs played a significant role in risk communication, this could be useful for the risk communication funding section.

Credibility: Moderate

Kamai-Yanni, M. (2015). "Never again: building resilient health systems and learning from the Ebola crisis." Retrieved 5 Dec 2016, 2016, from http://oxfamilibrary.openrepository.com/oxfam/bitstream/10546/550092/7/bp-never-again-resilient-health-systems-ebola-160415-en.pdf.

NOTE: Mentions funding via user fees, taxation and donor contributions, noting that user fees punish the poor. These are for resilient health systems and universal health care,

not for risk communication specifically.

Credibility: Moderate

Kamradt-Scott, A., et al. (2015). "Saving Lives: The civil-military response to the 2014 Ebola outbreak in West Africa." Retrieved 30 Nov 2016, 2016, from http://sydney.edu.au/arts/ciss/downloads/SavingLivesPDF.pdf.

Key Recommendations:
2. Immediately and substantially increase international investment - informed by empirical evidence and frameworks such as the International Health Regulations (2005) - to address existing capacity gaps in disaster management and outbreak response.

3. Cite the 2014 Ebola outbreak to advocate for greater government resources to address the capacity gaps in national health systems. This includes leveraging support from international actors to secure the requisite technical and financial support to build local capacity.

NOTE: Financing mentioned, but not specifically for risk comms.

Credibility: High

Kates, J., et al. (2015). "The US response to Ebola: Status of the FY 2015 Emergency Ebola Appropriation." Retrieved 5 Dec 2016, 2016, from https://kaiserfamilyfoundation.files.wordpress.com/2015/12/8809-02-the-u-s-response-to-ebola-status-of-the-fy2015-emergency-ebola-appropriation.pdf.

The Ebola outbreak of 2014 was a global wake-up call regarding the ongoing threat of emerging infectious diseases. After a slow initial response by the global community, including the U.S. government, the U.S. mounted what has become the largest effort by a single donor government to respond to Ebola. This includes an emergency appropriation of $5.4 billion by Congress as part of its final FY 2015 spending package, a funding amount significantly larger than previous emergency response efforts to address emerging infectious disease outbreaks such as SARS and avian influenza.1,2 Since this funding was designated by Congress as an emergency funding measure, it did not count toward existing budget caps on discretionary spending.

Today, a year later, as Ebola case numbers have dropped and countries have been declared Ebola-free, the emergency response has been winding down and a transition period toward more sustained support for health systems in the region and other vulnerable areas has begun. Given the large U.S. investments for Ebola, including approximately $2.0 billion that has been obligated by the U.S. for the international response effort, now is an opportune time to examine where the U.S. response stands.3,4 What specifically was funding provided for and what is its current status? How is U.S. funding being used to address the outbreak and its aftermath, and prepare for future health threats? How available and transparent is information about these activities?

This issue brief seeks to shed light on some of these issues, focusing on the $5.4 billion emergency Ebola funding and providing an overview of its international activities, the agencies carrying out these activities, and the status of funding to date.

Note: Although mention is made of funding appropriated to communication & community engagement, details of activities and expenditures are not provided.

Credibility: Moderate

Ki-moon, B. (2015). "Letter dated 10 February 2015 from the Secretary-General addressed to the

President of the General Assembly." Retrieved 6 Dec 2016, 2016, from http://www.un.org/en/ga/search/view_doc.asp?symbol=A/69/759.

NOTE: Provides funding/disbursement details, although not separate numbers for risk communication.

Credibility: Moderate

Miller, L., et al. (2016). "The Ebola Lessons Reader: What's being said, what's missing and why it matters ". from https://www.rescue.org/sites/default/files/document/563/theebolalessonsreaderlowres.pdf.

NOTE: Touches on financing, but not specifically about risk communication funding.

Credibility: High

National Academy of Medicine (2016, 2016-01-13). "The Neglected Dimension of Global Security: A Framework to Counter Infectious Disease Crises." from https://www.nap.edu/catalog/21891/the-neglected-dimension-of-global-security-a-framework-to-counter.

Recommendation A.2: Committing and mobilizing the incremental financial resources required to implement the framework, as set out in the report The Neglected Dimension of Global Security: A Framework to Counter Infectious Disease Crises, which amount to about $4.5 billion per year.

Recommendation C.1: By the end of 2016, the World Health Organization should create a Centre for Health Emergency Preparedness and Response— integrating action at headquarters, regional, and country office levels—to lead the global effort toward outbreak preparedness and response. This centre should be governed by an independent Technical Governing Board. The WHO Centre for Health Emergency Preparedness and Response (CHEPR) will need sustainable funding. To achieve this, there should be an appropriate increase in member states' core contributions. These required contributions are a better resource than relying on voluntary contributions, which are often unpredictable and ultimately unsustainable, to support a core function of WHO.

NOTE: Primary source of public health funding must be national domestic budgets.

Lower-middle-income and low-income countries should discuss with their multilateral and bilateral partners the appropriate balance of domestic resource mobilization and external support (which might be directed at helping upgrade capacities and infrastructure, contingent on local governments' commitments to maintain support thereafter). This could be achieved through a range of options, including: 1. individual country-level negotiations with donor partners around national plans to rectify gaps; 2. negotiations under the umbrella of existing multi-country initiatives, such as the GHSA and the World Bank–funded Laboratory Network in 18 countries in east, central, and southern Africa; 3. through the creation of a new fund, with grants and/or loans linked to commitment to ongoing financial support from domestic resources; and 4. a combination of Options 1 and 2, with the World Bank providing overall coordination to minimize duplication and gaps.

Credibility: High

National Association of County and City Health Officials (NACCHO) (2016). "Impact of the Redirection of Public Health Emergency Preparedness (PHEP) Funding from State and Local Health Departments to Support National Zika Response." from http://www.naccho.org/uploads/downloadable-resources/Impact-of-the-Redirection-of-PHEP-Funding-to-Support-Zika-Response.pdf.

The National Association of County and City Health Officials, the Association of State and

Territorial Health Officials, the Council of State and Territorial Epidemiologists, and the Association of Public Health Laboratories partnered to conduct an impact assessment survey on recent cuts to Public Health and Emergency Preparedness (PHEP) grants. Congress has not passed emergency supplemental funding for Zika, and as a result the Centers for Disease Control and Prevention will be redirecting $44.25 million of PHEP funds away from local and state health departments to support the national Zika response. As a result, state and local health departments are losing the resources they need to effectively respond to Zika and other emergencies at the community level. The coordinating organizations released the following two complementary reports describing the impact of redirected PHEP funds.

NOTE: Perhaps an example of how NOT to fund risk communication nationally.

Credibility: Moderate

NYC Health (2016). "Innovative practice: New York City Outreach Teams." Retrieved 7 Dec 2016, 2016, from https://www.fema.gov/media-library-data/1463503813546-3390eb443d46c610c371b3cefda5f580/NYC_CmmntyOtrchInnoPract_Clean_20160517.pdf.

Describes how NCY set up multi-lingual and multi-cultural outreach teams to provide risk communication to the city's people after the first case of Ebola in the US.

When the Centers for Disease Control and Prevention confirmed the first-ever case of Ebola Virus Disease (EVD) in the United States, New York City (NYC) quickly acted to educate the public about EVD and its associated risks. In support of this effort, the NYC Department of Health and Mental Hygiene (DOHMH) deployed community outreach teams to distribute informational materials and engage the public in discussions about EVD. Supported through $170,000 in Public Health Emergency Response funds, the teams' efforts alleviated public fears and provided New Yorkers with practical information about how to protect themselves against spreading or contracting EVD. The community outreach teams offer other communities a successful model for sharing emergency preparedness information with the public.

Credibility: Moderate

Office of the UN Secretary-General's Special Envoy on Ebola and Multi-Partner Trust Fund Office and UNDP (2015). "Ebola response interim report for the Period October 2014 to January 2015." Retrieved 5 Dec 2016, 2016, from http://reliefweb.int/sites/reliefweb.int/files/resources/MPTF%20Report%20FINAL.pdf.

NOTE: Document reports on the UN response to Ebola, detailing disbursements, including the percentages allocated to various interventions in the 3 hardest-hit countries. Includes percentage for social mobilization. Emphasizes repeatedly the importance of community engagement and communicating accurate information to allow people to protect themselves.

Credibility: Moderate

Oxfam International (2015). "Prioritising Community Engagement to Strengthen Health Systems in Ebola Recovery." Retrieved 30 Nov 2016, 2016, from https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/ib-prioritising-community-engagement-health-systems-ebola-recovery-090715-en.pdf.

3. Extensive, resourced and integrated CHW programmes are important. The funding requests put forward by governments to build and formalise the work of CHWs should be considered affordable, cost-effective and a priority area for support by donors.

NOTE: Provide regular support (transport, pay, expenses) to CHWs and mobilization volunteers.

Credibility: Moderate

Sugg, C. (2016). "Coming of age: communication's role in powering global health." Retrieved 4 Jan 2017, 2017, from http://downloads.bbc.co.uk/mediaaction/policybriefing/role-of-communication-in-global-health-report.pdf.

Through a careful review of the evidence, this paper illuminates how communication has been a consistent current running through many major health developments of recent years. Whether by
influencing individual behaviour, galvanising community action, shaping social expectations or informing the way in which health services are provided, communication has been at the heart of public health. It has the potential both to mitigate health crises and to exacerbate them.

This critical interplay between human health and communication has now been recognised in assorted global and national health policies on paper. However, when it comes to funding allocation and the ways in which health programmes are implemented on the ground, clear deficits can be seen. Too often, health communication is poorly funded, under-utilised and badly planned, bolted on to programmes as an apparent afterthought. This needs to change if progress towards a healthier world is to be accelerated.

NOTE: Recommendations include making social and behavioural change communication an integral part of health programs, using longer-termed, multi-pronged approaches; increased funding for SBCC research - make sure lessons learned are compiled and applied; create an institutional "home" for health communication; and increase health communication capacity in governments & civil society organizations.

Provides many examples of the way SBCC has saved lives and dollars in LMIC. Donor funding needs to be systematic & sustained.

Credibility: High

Toppenberg-Pejcic, D., et al. (2016). Evidence to Support the Guideline on Emergency Risk Communication: Search Summary. Unpublished.

NOTE: Documents search conducted for Q4. No results found directly addressing sources of sustainable funding for emergency risk communication.

United Nations General Assembly (2016). "Protecting humanity from future health crises: Report of the High-level Panel on the Global Response to Health Crises." Retrieved 4 Jan 2017, 2017, from http://www.un.org/ga/search/view_doc.asp?symbol=A/70/723.

Thirdly, appropriate financing is required. Assistance should be provided to countries requiring additional support for compliance with IHR, while WHO and the new centre for emergency preparedness and response must be resourced to meet global needs. In addition, a fund should be established to support research and development for vaccines, therapeutics and diagnostics for neglected communicable diseases.

NOTE: The recommendations specifically mention community engagement. They also deal with financing of response efforts, including funding for preparedness, although specific risk communication funding is not mentioned.

Credibility: High

United Nations Global Ebola Response (2015). "Ebola outbreak: updated overview of needs and requirements for January-June 2015." Retrieved 6 Dec 2016, 2016, from http://ebolaresponse.un.org/sites/default/files/onr2015.pdf.

NOTE: Specific budget numbers listed for social mobilization and community engagement. No funding listed for messaging.

Credibility: Moderate

University of Chicago National Research Center and The March of Dimes (2016). "The Zika virus: gaps in Americans' knowledge and support for government action." Retrieved 8 Dec 2016, 2016, from http://www.norc.org/PDFs/MarchOfDimes/Report_March_of_Dimes_NORC_Zika_Poll_090616.pdf.

Provides some funding information but does not include risk communication funding.

Credibility: Moderate

Wilkinson, S. (2016). "Using media and communication to respond to public health emergencies: lessons learned from Ebola." from http://downloads.bbc.co.uk/mediaaction/pdf/practicebriefings/ebola-lessons-learned.pdf.

During the Ebola outbreak BBC Media Action carried out a number of mutually reinforcing media and health communication interventions using multiple media platforms and genres. Funding from the UK's Department for International Development, UNICEF, the Paul G Allen Family Foundation and the Bill & Melinda Gates Foundation enabled the organisation to respond to the crisis in many ways. The most intense phase of BBC Media Action activity was from October 2014 – when the funding required to mount a large-scale response became available – until November 2015, when the World Health Organization (WHO) first declared that there was no more transmission of Ebola in Sierra Leone.

One knock-on effect of the initial lack of priority placed on communication, as well as WHO's delay in declaring the outbreak an emergency, was a lack of funding for media and communication-related activities. This included financial and capacity-strengthening support for local media to help them to meet the needs of their audiences.

Credibility: High

World Health Organization (2015). "Accelerating progress on HIV, tuberculosis, malaria, hepatitis and neglected tropical diseases: A new agenda for 2016-2030." Retrieved 11 Dec 2016, 2016, from http://apps.who.int/iris/bitstream/10665/204419/1/9789241510134_eng.pdf.

Increased resources. The unprecedented mobilization of resources around MDG-related activities was a key contributor to success, despite the sometimes uneven distribution of funds across disease-response efforts. Disbursements for official development assistance for health tripled after 2000. An estimated 61% of all development assistance for health disbursed between 2000 and 2014 targeted initiatives related to the three MDG health goals. Disease responses also benefited substantially from the creation of dedicated funding mechanisms, including the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), the United States (US) President's Emergency Plan for AIDS Relief (PEPFAR), and the US President's Malaria Initiative, and innovating financing, such as through UNITAID.

NOTE: Discusses funding issues, but not specifically risk communication funding.

Credibility: High

World Health Organization (2016). "Implementation of the International Health Regulations (2005): Report of the Review Committee on the Role of the International Health Regulations (2005) in the Ebola Outbreak and Response." Retrieved 4 Jan 2017, 2017, from http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_21-en.pdf.

3. Finance IHR implementation, including to support the Global Strategic Plan

WHO, States Parties and international development partners should urgently commit to providing financial support at the national, regional and international levels for the successful implementation of the Global Strategic Plan.

NOTE: Committee finds that the problem is not the IHR themselves, but the fact that they have not been implemented. Does not address risk communication funding specifically.

Credibility: HIGH

World Health Organization (2016). "Progress Report on the Development of the WHO Health Emergencies Programme 30 March 2016." Retrieved 3 Jan 2017, 2017, from http://www.who.int/about/who_reform/emergency-capacities/who-health-emergencies-programme-progress-report-march-2016.pdf?ua=1.

NOTE: Document provides details on the establishment of WHO's Health Emergency Programme. Budget information provided for the program, and disbursement details for Zika, etc. Does NOT provide information specific to risk communication funding. Notes that the program has responded to Yellow Fever, Zika, Cyclone Winston, etc. Response includes coordinating with other organizations.

Credibility: Moderate

World Health Organization (2016). "Zika Strategic response plan quarterly update July-September 2016." from http://apps.who.int/iris/bitstream/10665/250626/1/WHO-ZIKV-SRF-16.4-eng.pdf?ua=1.

NOTE: Provides budget information for prevention, most of which is risk communication and community mobilization.

Credibility: High

World Health Organization (2016). "Zika: Strategic response framework and joint operations plan, January-June 2016." Retrieved 1 Dec 2016, 2016, from http://apps.who.int/iris/bitstream/10665/204420/1/ZikaResponseFramework_JanJun16_eng.pdf.

Document includes ERC & community engagement, as well as budget allotment details.

Credibility: Moderate

Y Care International (2016). "Sierra Leone YMCA Ebola Outbreak Emergency Response Evaluation Report." Retrieved 30 Nov 2016, 2016, from http://1c8puy1lylrov7ssf1oz3o22.wpengine.netdna-cdn.com/wp-content/uploads/2016/03/SLYMCA-Ebola-Emergency-Response-Evaluation-Report.pdf.

NOTE: Presents YMCA's lessons learned from the Ebola outbreak response. Does not appear to address risk communication directly, but does deal with community engagement, collaboration and funding. Lack of funding hindered response activities at the beginning.

Credibility: CASP - low; AACODS - Moderate

Q5: What are the best and most generalizable emergency risk communication activities that build trust in health authorities as a source of health protection information among affected communities and other stakeholders?

Anoko, J. N. (ND). "Communication with rebellious communities during an outbreak of Ebola Virus Disease in Guinea: an anthropological approach." Retrieved 2 Dec 2016, 2016, from http://www.ebola-anthropology.net/wp-content/uploads/2014/12/Communicationduring-an-outbreak-of-Ebola-Virus-Disease-with-rebellious-communities-in-Guinea.pdf.

NOTE: The political realities of Guinea, especially in the Forest Guinea region where the population is heavily Kissi minority, have created extreme mistrust of whites (French colonialism) and the government (civil war). Attempts to modernize Guinea, to stamp out the traditional religion the Kissi adhere to, and what is seen as government officials profiting at Kissi expense have further exacerbated the situation. Further aggravation is caused by the fact that very few government officials for this region have ever been from there. In a situation this charged with mistrust, it is vital to take into account the political realities, both past and present, and gain acceptance through the agency of people from the community and accepted by them. Many Kissi thought that Ebola was a deliberate ploy of the government to finish them off.

Credibility: Moderate

Assessment Capacities Project (ACAPS) (2015). "Ebola Outbreak, Liberia: Communication: Challenges and Good Practices." from https://www.acaps.org/sites/acaps/files/products/files/u_liberia_communication_challenges_and_good_practices_dec_2015-ilovepdf-compressed_ul.pdf.

Lessons learned:
+ Understand and adapt to the local context: In Liberia the collective trauma associated with the civil war continues to deeply influence the way people relate to and interpret official information. In addition, there are 16 major ethnic groups, 20 indigenous languages and a diverse range of oral traditions. Anthropologists played a pivotal role in helping responders better understand and address some of the socio-cultural and political dimensions of the Ebola outbreak.

Credibility: High

Assessment Capacities Project (ACAPS) (2015). "Ebola Outbreak, Sierra Leone: Communication: Challenges and Good Practices." from https://www.acaps.org/sites/acaps/files/products/files/v_sierra_leone_communication_challenges_and_good_practice_dec_2015_2-ilovepdf-compressed_ul.pdf.

Also a legacy of civil war and dysfunctional government. People reported having to bribe government officials just to get through daily life. Placing over 1M people under quarantine further fuelled the fires of mistrust. Community leaders: Trusted members of communities serve as great role models for behaviour change. Significant improvements in community perceptions of key
messages came when religious scholars were consulted to incorporate faith elements into public health messages, and provide examples from religious texts to support them (CAFOD, 2015).

Credibility: High

Balde, A. (2016). "How elements of culture have contributed to the construction of health meanings in regards to the 2014 Ebola outbreak." Department of Communications Studies. MA Communications Studies, from https://scholarworks.iupui.edu/bitstream/handle/1805/10897/Balde%20Thesis%20Submitted.pdf?sequence=1&isAllowed=y.

Some Guineans believe Ebola was a plot by the government for population control and

organ harvesting for other countries. Blaming Ebola on eating bush meat, strengthened mistrust, as people knew they'd been eating bush meat for hundreds of years without catching Ebola. Arguing over the cause of Ebola and trying to force a scientific explanation on people also deepened the rift.

Credibility: High

Bastide, L., et al. (2015). Generating evidence by capturing field experience from WHO-led deployments of risk communication experts to West Africa. Geneva, Geneva School of Social Sciences, Department of Sociology.

This study looks at Emergency Communication Networks (ECN), groups of communication experts ready to deploy on short notice for WHO to emergency settings. One thing these networks succeed at is spreading trust. Bastide notes that this trust comes from shared experience. People have trained together or have already worked together, so they share common experiences, which builds bond and generates complicity trust. Sharing a base of technical skills, norms and values fosters recognition trust. The study further notes that complicity trust is deeper and stronger than recognition trust, because it is emotional and involves intimate experience of those trusted.

Credibility: High

Davis, T. and A. e. Srinivasan (2016). "Ebola Barrier Analysis Compendium: Summary of Barrier Analysis Studies on Ebola-related Behaviors ". Retrieved 12 Jan 2017, 2017 from http://www.fsnnetwork.org/sites/default/files/BA_Ebola_Compendium.pdf.

The outbreak of Ebola Virus Disease (EVD) in West Africa devastated the countries of Guinea, Liberia, and Sierra Leone. The rapid spread of the virus revealed the extent to which existing systems were weak and non-functional. Though much attention was given to the faults in the health care systems in these countries, of equal importance were the flaws in the system for communication. Trust between communities and Government was sub-optimal, and those in a position to communicate to the affected communities (e.g., Government, Non-Government Organizations [NGOs]) did not apply the best principles of behavior change communication. As of March 2016, Liberia was successful in achieving Ebola free status. However, the World Health Organization (WHO) has warned about possible Ebola flare ups. One case of death was reported in Sierra Leone on 15 January 2016, and two people tested positive for Ebola in Guinea on 17th March 2016. It is therefore a good time to take stock of lessons learned in the promotion of lifesaving behaviors during an Ebola epidemic.

b. For some of the behaviors related to Ebola, community leaders played an important role in bringing about a positive difference. Being a key stakeholder and a role model in their community, they can play a key role in the rapid uptake of preventive behaviors. However, not all leaders are trusted. There is a need to educate community leaders on communicable disease prevention and ensure that these leaders can be easily contacted by locals during a crisis.

People are also highly influenced by the opinions and recommendations of their peers and family members, so moving life-saving information out to a higher proportion of community members (not just leaders) through trusted individuals is important in halting an epidemic. Volunteer peer educators (e.g., Care Group Volunteers) can be useful for this purpose.

NOTE: Some people distrust those paid to do Ebola work.

Credibility: High

Denney, L., et al. (2015). "After Ebola: why and how capacity support to Sierra Leone's health sector needs to change ". Retrieved 5 Dec 2016, 2016, from http://www.securelivelihoods.org/resources_download.aspx?resourceid=362&documentid=457.

5.3 Quality healthcare exists when people trust the health system. Capacity building should pay
closer attention to state-society relations.

NOTE: Trust in health systems is based not only on objective measures of that system (number of facilities, quality of service delivered), but also on people's perceptions of these systems. Healthcare workers treating people disrespectfully erodes trust. Staff need training/development of softer communication and interpersonal skills to help build trust.

Credibility: High

Hird, T. and S. Linton, eds. (2016). "LESSONS FROM EBOLA AFFECTED COMMUNITIES: Being prepared for future health crises." from http://www.royalafricansociety.org/sites/default/files/reports/AAPPG_report_3.10_sngls_web.pdf.

This report finds that response efforts were most effective when communities demanded assistance at the local level. It therefore advocates that although a top down approach (nationally and internationally) may always be necessary in a health crisis such as an Ebola outbreak, it is only effective when the affected communities trust that response. The report acknowledges that the need to react rapidly in a health crisis makes it almost impossible to consult communities immediately. However the key lesson in ensuring preparedness for future health crises is that health systems should be developed horizontally, local ownership should be prioritised and investment made at community level. Such approaches foster trust and create demand for health services. Communities should be consulted about their needs and local facilities and systems developed to provide permanent services which local people trust and access and which can respond effectively during a crisis.

Credibility: High

International Rescue Committee (IRC) (2016). Evaluation of IRC support of the Restoration of Health Services at Redemption Hospital.

NOTE: Document presents evidence surrounding the rehabilitation and reopening of Redemption Hospital in Monrovia, Liberia after the Ebola epidemic. Document does NOT discuss risk communication. It does offer examples of and insight into community engagement and communication necessary to rebuilding trust. Improving staff communication skills was key, as was facilitating community access (tours) to the hospital and fostering communication between the community and the health care system. Also important was mental health care for workers and improving their ability to provide care by providing supplies, etc.

Credibility: Moderate

International Rescue Committee (IRC) (2016). Montserrado Ebola Prevention and Response Consortium Evaluation, International Rescue Committee (IRC).

NOTE: Sharing information between consortium members was vital to effective work and helped build trust, as did getting technical input from WHO. Notes that at the beginning, community engagement was not seen as important. Recognition at the end that community engagement was central to a successful response, community engagement, collaboration & allowing the communities to drive the process.

Credibility: Moderate

Mallett, R. and L. Denney (2015). "After Ebola: towards a smarter model of capacity building." Retrieved 5 Dec 2016, 2016, from http://www.securelivelihoods.org/resources_download.aspx?resourceid=363&documentid=481.

Recommendations:

2. Capacity building should pay closer attention to the intangible and invisible dimensions of capacity, including the nature of state-society relations. Public perceptions of the quality of a service quality matter as much as its 'objective quality' (e.g. numbers of trained staff, availability of medicine, environmental hygiene). When people have little confidence in the capacity of a provider to deliver quality care, they are unlikely to use that service. The Ebola outbreak has underscored the fragile trust that exists between state and society in Sierra Leone, and post-Ebola support to the health system must address this underlying issue. This might be achieved, for instance, by engaging community members in service delivery meetings and activities, which research suggests are often associated with better perceptions of government (Mallett et al., 2015).

Credibility: High

Medecins Sans Frontieres (2016). "MSF supported research on Ebola." Retrieved 1 Dec 2016, 2016, from http://www.msf.org/sites/msf.org/files/msf_ocb_ebola_research_en_web.pdf.

Understanding the community MSF anthropologists had the important role of finding out what the affected communities thought of the Ebola virus and government control measures such as quarantine. This research allowed MSF to identify areas of misunderstanding and rumour within the community. Health promotion messages were then targeted to address these knowledge gaps. In addition, anthropologists were crucial for identifying the beliefs and behaviours within communities that facilitated further spread of the Ebola virus.

State imposed cremation of Ebola cases in Liberia and quarantine of contacts in Sierra Leone caused significant fear and mistrust among affected populations which sometimes resulted in behavior that increased the spread of the virus.

In any future flare ups of Ebola, it will be necessary to incorporate community led solutions for controlling the outbreak.

Credibility: Moderate

Miller, L., et al. (2016). "The Ebola Lessons Reader: What's being said, what's missing and why it matters ". from https://www.rescue.org/sites/default/files/document/563/theebolalessonsreaderlowres.pdf.

Secondly, and more seriously, these reports reflect a persistent weakness of the global conversation about health systems: the erasing of politics. This includes the politics of poor, post-conflict countries, but also the politics of the UN, NGOs and the international aid world. These failures set the stage for a small Ebola outbreak to evolve into a catastrophic epidemic. The failure to anticipate and adapt to political realities then hobbled the response effort.

NOTE: Discusses trust issues and community engagement, noting that without including politics (local to international) in the discussion, these topics hold little meaning. In order to be effective, interventions must take into account the political histories and realities on the ground.

Credibility: High

Oosterhoff, P., et al. (ND). "Community-Based Ebola Care Centres: A formative evaluation." Retrieved 9 Jan 2015, 2017, from http://www.ebola-anthropology.net/wp-

content/uploads/2015/07/Community-Based-Ebola-Care-Centres_A-Formative-Evaluation1.pdf.

Communities in Sierra Leone had low levels of trust in government authorities and services before Ebola. It is important to reflect on the possible long-term political and public health effects of giving people free health care in an Ebola centre and then taking this away from them. Given the complaints about political favouritism during the process of developing and setting up CCCs, it is essential that the transition and CCC decommissioning processes are transparent and led by trusted people. Who exactly is 'trusted' to lead CCC stocktaking exercises in a local village will depend partly on who is seen as having benefitted from Ebola. It is important to avoid the same leaders being in charge of every decision made and thus being seen as the 'judge, jury, and executioner'.

NOTE: Although document itself provides no date, website lists 2015, and cited sources would agree with this.

Credibility: High

Richards, P., et al. (2015). "Village Responses to Ebola Virus Disease and its Prevention." from http://www.ebola-anthropology.net/case_studies/village-responses-to-ebola-virus-disease-and-its-prevention/.

The present document is the eighth and final report in a series presenting descriptive results of a survey of responses to Ebola and Ebola control in 26 villages in all three provinces of rural Sierra Leone, fieldwork for which was undertaken in December 2014. The report covers three villages in Gbo chiefdom, in Bo District. Some emphasis is placed on how inconsistencies of Ebola response are perceived at local level, and undermine trust. Ebola responders should not only improve the quality of their messages, but also concentrate on explaining aspects of the response that villagers find most puzzling, if trust is to be restored.

Our evidence suggests that most rural Sierra Leoneans have a good grasp of EVD infection pathways and react accordingly. Evidence of a downturn of Ebola infection in southern and eastern Sierra Leone predates much of the major international response towards the end of 2014. This is not to say that this effort was not needed, but to argue that local opinion was already pre-conditioned to the kinds of control measures needed to break the Ebola transmission cycle. In other words, villagers had learnt, even in advance, to "think like epidemiologists". But local trust has been eroded by mixed messages and a failure on the part of responders fully to admit earlier mistakes and inconsistencies, and to explain, in terms meaningful to local populations, subsequent changes in policy on disease control. Here it is argued that trust could be restored if epidemiologists, and the Ebola response community more generally, learnt to "think like villagers". The data presented in this report, and in the seven that precede it, are intended to help that empathetic learning task.

Credibility: Moderate

Richards, P., et al. (2015). "What causes Ebola Virus Disease? Views from four villages on the edge of the Gola Rain Forest National Park, Sierra Leone." Retrieved 9 Jan 2017, 2017, from http://www.ebola-anthropology.net/wp-content/uploads/2015/02/Ebola-causes-and-questions.pdf.

NOTE: This document examines villager perceptions about what causes EVD. It raises an important issue about distinguishing between certainties and uncertainties in public health communications. The person-to-person spread of EVD is well documented and villagers recognize this. The causal link with eating bush meat is not proven and villagers note that they are being told not to eat bush meat even though this has not been proven as the cause of EVD. Implications for trust.

Credibility: Moderate

Savoia, E. and K. Viswanath (2015). "RICE – RIsk Communications Evaluation." from https://www.yumpu.com/en/document/view/31171296/rice-risk-communications-evaluation/6.

NOTE: Coordination and collaboration between risk assessment experts and communication experts is essential, as are transparency and trust. Communication needs to acknowledge a crisis immediately and be open about uncertainties. Political pressure undermines transparency and trust. Risk communication needs to be integrated at all levels - from local to global. All stakeholders need to be engaged in the communication process. Communication inequalities need to be taken into consideration. Discusses capacity and evaluation. Evaluation can be a media reporting level, as well as population level.

Credibility: High

Q6: What are the best ways to ensure coordination of risk communication activities between responding agencies across organizations and levels of response?

Adams, V., et al. (2016). "OCB Ebola Review: Summary Report." Retrieved 12 Jan 2017, 2017, from http://cdn.evaluation.msf.org/sites/evaluation/files/attachments/ocb_ebola_review_summary_report_final_3.pdf.

LESSON LEARNED: A better analysis and understanding of the functioning of national and international bodies, their sensitivities and their regulations (e.g. knowing about the international health emergency mechanism) could have accelerated the take up of MSFs message. In particular, targeting WHO at the right level earlier or using influential states or institutions as door openers might have helped a faster advocacy impact.

Credibility: High

Bristol, N. and C. Millard (2015). "The power of straight talk: The Independent Monitoring Board of the Global Polio Eradication Initiative." Retrieved 12 Dec 2016, 2016, from https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/publication/150921_Bristol_PowerStraightTalk_Web.pdf.

Document primarily discusses the Independent Monitoring Board (IMB) of the GPEI - why it was established, what it has done and with what success. It finds that the IMB model could prove useful if the board had strong leadership, and clear targets against which to evaluate progress, if it were willing to speak frankly about program short-comings, and if the programs it monitored were open to constructive criticism. Perhaps also of interest as a case study of one option for coordinating across countries and agencies.

Credibility: Moderate

Denney, L., et al. (2015). "After Ebola: why and how capacity support to Sierra Leone's health sector needs to change ". Retrieved 5 Dec 2016, 2016, from http://www.securelivelihoods.org/resources_download.aspx?resourceid=362&documentid=457.

NOTE: Also mentions communication and coordination issues between different levels of government as contributing to the epidemic. Also problems with insufficient communication & dissemination of incorrect information. Also communication breakdowns between government and donors. Need for staff training/development of softer communication and interpersonal skills to help build trust.

Credibility: High

DuBois, M., et al. (2015). "The Ebola response in West Africa: Exposing the politics and culture of international aid." Retrieved 1 Dec 2016, 2016, from https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9903.pdf.

Although meaningful support began to arrive in September 2014 – including significant funding pledges, international military and civilian deployments and the creation of the United Nations Mission for Ebola Emergency Response (UNMEER), the UN's first-ever health mission – humanitarian agencies struggled to translate energy and effort into relevant programme activities. Some issues speak to the more general situation at the time, with other large-scale crises in Syria, South Sudan, the Central African Republic (CAR) and Iraq, while others reflect deeper shortcomings in the aid system to do with capacity, funding and organisational bureaucracy. Individual fears of infection were magnified within organisations by the duty of care to keep staff safe.

Credibility: High

Health Communication Capacity Collaborative (2016). "HC3 Landscaping Summary Report on

Zika Coordination and Communication in Four Countries: Honduras, El Salvador, Dominican Republic and Guatemala, March – April 2016." from http://www.zikacommunicationnetwork.org/sites/default/files/resource_files/Zika-Summary-Report-FINAL-03Aug2016.pdf.

While the government of each country is taking a lead in the response, transparency of their actions and plans, as well as the regular sharing of local statistics, varies widely. In El Salvador, two government---led coordinating mechanisms meet regularly: (1) an inter---sectoral government meeting that is held weekly and (2) a monthly meeting that includes government, NGOs and international and bilateral groups with the wider stakeholders, where there appears to be high technical involvement of partners.

In Guatemala, the Technical Aedes Group led by the Ministry of Public Health and Social Assistance (MSPAS) meets internally each week and bi---weekly with partners. Coordination with the latter can be ad hoc. The group has developed an integrated plan for dengue, chikungunya and Zika for the short---term (two months) and the long term (one year). The group is highly technical in its membership and discourse, lacking members with sufficient political influence to advocate for changes and swift action at higher levels. For example, the group has been unable to bypass considerable bureaucratic red tape to accept a large donation of insecticide. This has resulted in a several month delay in accessing and using the insecticide as part of the Aedes plan.

In the Dominican Republic, the government runs weekly meetings: one internal to the MOH and the other with all key national stakeholders at the national emergency response centre. A communication roundtable convened by PAHO for the NGO and donor community also meets regularly. However, the NGOs are frustrated with the MOH's slow response to approve their individual risk communication and community outreach plans and are not clear on why the confirmed cases are so low, creating a climate of distrust and hampering collaboration.

In Honduras, the coordination and transparency seemed less developed, with the government calling ad hoc meetings with different partners. However, we understand that since our visit more regular collaboration and meetings have taken place through the stakeholder group lead by UNICEF.

Both the El Salvador and DR Ministries of Health generate weekly bulletins available to all, while in Guatemala weekly statistics are shared at the Ministry's Aedes meeting, and Honduras generates weekly bulletins which are available for MOH key officers and international agencies.

Both Honduras and Guatemala have decentralized health systems, which led stakeholders in Guatemala and Honduras to express concern that it created uncertainty around roles in terms of vector control and reporting (in the case of Honduras), and a disconnect between the technical guidance produced at the national level and implementation happening at the regional or local level. It can also cause a lag time between case identification at the regional level and case registration at the national level.

NOTE: Coordination recommendations included broadening the spread of organizations involved in prevention efforts to include NGOs, church networks and the private sector. Interfacing with international health bodies, such as the Council of Ministers of Health of Central America and Dominican Republic (COMSICA) and the Central American Integration System (SICA) to facilitate greater consistency in prevention and messaging and to share best practices and lessons learned was also recommended.

Credibility: High

International Rescue Committee (IRC) (2016). Montserrado Ebola Prevention and Response Consortium Evaluation, International Rescue Committee (IRC).

OFDA funded the IRC to lead a consortium of four other NGOs to support an integrated response: case investigation, contact tracing, infection prevention and control (IPC), dead body management (DBM) and information management, the core building blocks of a functioning system to ensure that patients – dead or alive – were cared for safely and in a timely way. The Consortium mechanism was deliberately chosen to force coordination and collaboration among NGOs. The design was based on the complementarity between and unique skills of each partner, leveraging their pre-existing capacity under one umbrella to give robust support to the MCHT.

When the Consortium was established, the outbreak was spiralling out of control; by late September cases were declining sharply, a welcome but surprising change of events. In response the Consortium had to refocus its attention to maintain vigilance, working even more closely with the MOH. The Consortium contributed significantly to coordination in the county during the bumpy road to Liberia's first declaration of being Ebola free on May 9th, 2015. Their leadership continued into the transition, supporting the development of a sustainable surveillance system, leveraging the capacity built and lessons learned from the Ebola Virus Disease (EVD) response.

The Consortium was consistently perceived to have been more effective as a united body than they would have been as individually funded agencies implementing the same activities. Members of the Consortium expressed a very egalitarian sense of accountability, with a strong commitment to the people of Liberia, the victims of the disease, and a common goal of ending the epidemic. The real strength of the Consortium was its ability to rapidly scale up solutions to problems, made possible by flexible funding from OFDA, practical expertise and easy collaboration. This would be important in any emergency, but was particularity important given the interdependency of the components of their work and the unprecedented scale and complexity of the epidemic.

External coordination was also key to the Consortium's effectiveness. With the changing context after the declining epidemiological curve, the Consortium played a critical role with the coordination among partners, formally and informally. Having earned respect for the strength of their implementation, the Consortium used its place in high level fora to air concerns and advocate for needed changes, confronting the government directly in a way other actors could not. As the emergency waned, the Consortium had the foresight to start conversations about applying the lessons learned from Ebola to building a national surveillance system that would be functional and sustainable. During this final phase, the unity of the Consortium waned as objectives became less clear cut and the emergency that had bonded the members together was over.

NOTE: Sharing information between consortium members was vital to effective work and helped build trust, as did getting technical input from WHO.

Credibility: Moderate

Kamradt-Scott, A., et al. (2015). "Saving Lives: The civil-military response to the 2014 Ebola outbreak in West Africa." Retrieved 30 Nov 2016, 2016, from http://sydney.edu.au/arts/ciss/downloads/SavingLivesPDF.pdf.

The 2014 Ebola outbreak in Guinea, Liberia and Sierra Leone proved to be an exceptional outbreak that blurred the lines between health and humanitarian crises. In so doing, it highlighted numerous problems with regard to the coordination of humanitarian disasters that have public health implications of international consequence. The manner in which the international response to this crisis unfolded has in turn prompted a number of high-level intergovernmental reviews of the key actors, institutions and systems that we - as a global community - currently rely upon. At the time of writing, some of these

reviews are yet to hand down their findings. This study, which was funded by the University of Sydney, provides a number of independent insights into the civil-military response and overall coordination of the Ebola outbreak in Liberia and Sierra Leone. It also offers recommendations to inform future research and response efforts.

The domestic health systems of Liberia and Sierra Leone were ill-equipped to address the size and scale of the Ebola outbreak. Overwhelmed, rapid international assistance was needed to halt the spread of the virus and save lives. The international civilian response to this crisis was, however, widely perceived as slow and inadequate. While key institutions such as the World Health Organization (WHO) have been heavily criticized, the role of non-government organizations (NGOs) was also mixed. A small number of non-state actors and international NGOs (INGOs) such as Medicines Sans Frontiers (MSF) reacted swiftly to the outbreak, but the majority of other organizations found themselves unprepared for a crisis of this nature, withdrawing personnel and closing down operations. This raises serious concerns about the overall capacity of the existing humanitarian system and agencies to respond to health-related crises.

Due to the inadequate civilian response, the 2014 Ebola outbreak also witnessed the deployment of thousands of military personnel to help contain the outbreak. The majority of respondents interviewed for this study were positive about the role of foreign military assistance (FMA), which was seen as a necessary last resort. In addition, Sierra Leoneans were generally positive about the role of domestic armed forces, which played a larger role in the Ebola response than their Liberian counterparts. However, several significant criticisms and concerns emerged as well. Foreign armed forces were perceived as risk averse and slow in constructing Ebola Treatment Units (ETUs). Criticism of domestic armed forces included the threat - and in some instances use of - violence and intimidation.

Key Recommendations:
1. Expand the terms of reference for the *United Nations High-Level Panel on Global* Response to Health Crises to include civil-military cooperation as part of the broader review of the international crisis response system.

4. Adverse health events must be recognised as equivalent to other disasters for their potential to cause or exacerbate humanitarian crises. Health actors must not preclude multi-sectoral collaboration with humanitarian, and if necessary, military actors even if an event is framed as a health crisis. Likewise, if an event is described as a humanitarian crisis the health aspects must not be lost.

5. Develop additional evidence-informed criteria to facilitate multi-level risk assessments that clearly delineate and guide civil-military responses to health-related humanitarian crises. This will help limit the risks of harmful and unintended consequences.

6. The United Nations Secretary-General commissions an independent research program to systematically investigate the roles and functions that military-based actors can perform - in collaboration with civilian authorities - during health-related humanitarian crises.

Credibility: High

Ki-moon, B. (2015). "Letter dated 10 February 2015 from the Secretary-General addressed to the President of the General Assembly." Retrieved 6 Dec 2016, 2016, from http://www.un.org/en/ga/search/view_doc.asp?symbol=A/69/759.

Across the three countries incidence rates have fallen and the total number of confirmed cases per week has significantly declined since 1 January. Progress in stemming the epidemic is associated with several factors, including strengthened government and

community ownership; improved coordination, especially at the subnational level; and progress on the integration of the four lines of action. The initiative shown by community leaders in identifying local solutions and messaging to tackle the outbreak has also played an instrumental role.

Nevertheless, targeted efforts will still be required to further reduce the number of cases in many districts and strengthen surveillance to ensure that new cases emanate from known contact lists. As at 25 January, 54 per cent of new confirmed and probable cases in Guinea, 100 per cent in Liberia and 21 per cent in Sierra Leone derived from registered contact lists. Integration of surveillance with contact tracing and social mobilization is therefore critical. In addition, while case management and laboratory capacities have been strengthened across the affected countries, adjustments continue to be needed in order to ensure sufficient geographic coverage and optimized utilization.

Note: includes further details of coordination meetings and repeatedly re-states the key role played by trust-building through social mobilization. Also provides funding/disbursement details, although not separate numbers for risk communication.

Credibility: Moderate

Mallett, R. and L. Denney (2015). "After Ebola: towards a smarter model of capacity building." Retrieved 5 Dec 2016, 2016, from http://www.securelivelihoods.org/resources_download.aspx?resourceid=363&documentid=481.

More attention needs to be paid to the connections, feedback loops and relationships between different individuals and different organisations across the local, district and national levels. Priorities for attention include: data reporting and management; sustained supportive supervision of health workers; integration of grievance mechanisms and other social accountability tools into public services; and coordination methods that actually facilitate coordination rather than just information sharing.

Credibility: High

Medecins Sans Frontieres (2015). "Pushed to the limit and beyond: A year into the largest ever Ebola outbreak." Retrieved 1 Dec 2016, 2016, from http://www.msf.org/sites/msf.org/files/msf1yearebolareport_en_230315.pdf.

Primarily a blow-by-blow report of the first year of the Ebola outbreak. Does list awareness raising as #3 of 6 activities crucial to stopping the epidemic. The narrative demonstrates how lack of communication, mistrust, lack of capacity, poor coordination, etc. contributed to the epidemic's spiralling out of control.

Credibility: Moderate

Miller, L., et al. (2016). "The Ebola Lessons Reader: What's being said, what's missing and why it matters ". from https://www.rescue.org/sites/default/files/document/563/theebolalessonsreaderlowres.pdf.

NOTE: Discusses trust issues and community engagement, noting that without including politics (local to international) in the discussion, these topics hold little meaning. In order to be effective, interventions must take into account the political histories and realities on the ground.

Mention is also made of the importance of including local leadership - religious and otherwise - in order to build trust. Also touches on inter-agency coordination, roles & responsibilities and cross-jurisdiction issues, although not directly in relation to risk communication.

Discusses the role of WHO and other organizations in responding to out outbreak, noting

that WHO's mandate is that of norm-setting, coordinating agency. Whether it was intended to be or should be an operational agency is still an unanswered question.

Touches on financing, but not specifically about risk communication funding.

Credibility: High

Prezant, D. (2016). "Innovative practice: Bio Isolation Transfer Cards." Retrieved 7 Dec 2016, 2016, from https://www.fema.gov/media-library-data/1464352019741-292cc9c6b398e481c66835e7d49ec2df/NYC_BITInnoPract_Clean_20160517-4.pdf.

Does NOT discuss risk communication, but does provide details of inter-agency coordination & planning in NYC in response to the first confirmed case of Ebola in the US.

Credibility: Moderate

Quinn, M., ed, (2016). "Governance and Health in Post-Conflict Countries: The Ebola Outbreak in Liberia and Sierra Leone." Retrieved 1 Dec 2016, 2016, from https://www.ipinst.org/wp-content/uploads/2016/06/1606_Governance-and-Health.pdf.

Building on these lessons, the authors offer a number of recommendations, including to:

- Implement existing national health policies and plans;
- Build national capacities to detect and respond quickly to health emergencies;
- Improve governance and leadership at the national and local levels;
- Strengthen community engagement in planning and managing health services;
- Rebuild trust in state institutions, including through dialogue with non-state actors;
- Ensure adequate budgetary allocations to the health sector;
- Improve oversight of health service delivery at the national and local levels;
- Build personnel capacity, particularly in rural areas; and
- Coordinate national efforts with regional and international efforts.

Credibility: Moderate

Savoia, E. and K. Viswanath (2015). "RICE – RIsk Communications Evaluation." from https://www.yumpu.com/en/document/view/31171296/rice-risk-communications-evaluation/6.

Interviewees insisted on the importance of ensuring collaboration between the risk communication and risk assessment experts, so that the content of risk communication messages is closely related to the actual facts. It is less clear how this coordination can be operationalized, and part of the difficulty interviewees reported is that these two units speak different languages. Messages to the public are frequently developed before the risk assessment process is completed. This is in part due to the circumstances which surround the initial phase of all crisis situations, which is a time dominated by uncertainty. However, interviewees also described it as resulting from a lack of coordination and understanding between the risk communication and risk assessment experts.

Finally, some interviewees discussed how risk communications activities are simultaneously implemented by different actors within the public health system, including both governmental and non-governmental agencies, and how all these actors become channels of dissemination. Coordination between these agencies is not always present and as such the resulting messages are often delivered in an inconsistent manner. Furthermore, emergency risk communications activities need to be evaluated in the context of the system in which they are delivered, as many variables, including social, economic, health system, and response factors, may impact their effectiveness.

NOTE: Simulation exercises were seen as helpful in improving coordination. Training risk communicators in the principles of risk assessment was also recommended.

Credibility: High

Schoch-Spana, M., et al. (2016). "How to Steward Medical Countermeasures and Public Trust in an Emergency – A Communication Casebook for FDA and Its Public Health Partners ". from http://www.upmchealthsecurity.org/our-work/pubs_archive/pubs-pdfs/2016/MCMCommCasebookJune102016.pdf.

10. Meet the needs of the media and remain accessible. Plan to work diligently with the media before and during an incident knowing that members of the public often rely on news outlets to learn about a crisis or risk.

Credibility: High

United Nations General Assembly (2016). "Protecting humanity from future health crises: Report of the High-level Panel on the Global Response to Health Crises." Retrieved 4 Jan 2017, 2017, from http://www.un.org/ga/search/view_doc.asp?symbol=A/70/723.

First, WHO must build a new centre for emergency preparedness and response and ensure that the world has a standing capacity to immediately identify and respond to emerging communicable disease threats. The centre must have real command and control capability, access to specialized human and operational resources to execute a health response, and the ability to visualize and share validated surveillance data in real time. The centre should benefit from the best technology available to ensure the global community can identify, track and respond effectively to any emerging threat.

Secondly, all countries must meet the full obligations of IHR. Where capacities are lacking, support should be provided to urgently implement a core set of measures. These measures should be under the direct authority of the Heads of Government and should include the establishment of pandemic preparedness and response mechanisms, with clear command and control; hiring and training health professionals and community health workers; and building a comprehensive surveillance system with a national laboratory.

The Ebola crisis also highlighted critical gaps in the international system for responding to health crises. In particular, the mechanism for monitoring compliance with the IHR core capacity requirements is weak. The lack of independent assessments affects international efforts to support more vulnerable countries in implementing preparedness, surveillance, detection and response capacities. In addition, the absence of a strong WHO response capacity and the lack of clarity over the inter-agency leadership and coordination arrangements for health crises delayed an effective response. This delay led the Secretary-General to take the unprecedented decision to establish the first United Nations health emergency mission. Urgent measures are needed to address these gaps and enhance global capacity to rapidly detect and respond to health crises. These include establishing a stronger periodic review of compliance with the IHR core capacity requirements, strengthening the WHO operational capacities, and enhancing the Inter-Agency Standing Committee coordination mechanisms to better respond to health crises.

NOTE: The recommendations specifically mention community engagement. They also deal with coordination at all levels and for seemingly all aspects of emergency response, except risk communication.

Credibility: High

United Nations Global Ebola Response (2015). "Ebola outbreak: updated overview of needs and requirements for January-June 2015." Retrieved 6 Dec 2016, 2016, from http://ebolaresponse.un.org/sites/default/files/onr2015.pdf.

The local response teams will need good leadership, good information support, good

logistical support and good coordination nationally. The teams will work with local government and communities to identify what needs to be done and how it will be done locally and they will need to able to draw on support from international expertise as necessary to enable their work. The task for the global community becomes one of ensuring the expertise and support gets where it is needed.

Lists 5 essential requirements for successful implementation: 1. Reliable information, 2. Building trust, 3. Skilled people - where they are most useful, 4. Effective management and coordination, 5. Supporting the responders

NOTE: Although coordination features as a significant theme in this document, risk communication coordination is not specifically addressed.

Credibility: Moderate

United Nations Global Ebola Response (2015). "Making a difference: the global Ebola response, outlook 2015." Retrieved 6 Dec 2016, 2016, from http://ebolaresponse.un.org/sites/default/files/ebolaoutlook.pdf.

Our experience of this outbreak so far has repeatedly taught us an important lesson. Success can only be achieved if communities themselves understand the nature of the outbreak and act in ways that reduce their likelihood of becoming infected. The elimination of the virus will only be achieved if those who are assisting with the response work under the supervision of national authorities, work closely together and ensure their efforts are offered in synergy. This calls for seamless coordination between actors, whether they work in villages and townships, at the level of local government areas, in the national capitals or at the international level.

REQUIREMENT 4:

Effective coordination: Well-organized systems for coordination are needed at the local level to enable all involved in the response to adjust their actions in line with available information. Responders should be coordinated in ways that enable professional teams to be assembled at district level and to ensure that services get to where they are needed.

Led by national governments and supported by international experts, the coordination service should apply to all responder organizations working in each community and location. In the coming weeks, more teams will be established in each local government area—over 60 teams in all. The United Nations system—working through UNMEER and engaging with affected governments and international partners—has a central role to play in ensuring coordination and alignment of the international response.

NOTE: Risk communication coordination not mentioned specifically.

Credibility: Moderate

United States Department of Homeland Security, O. o. t. I. G. (2016). "DHS' Ebola response needs better coordination, training and execution." Retrieved 5 Dec 2016, 2016, from https://www.oig.dhs.gov/assets/Mgmt/2016/OIG-16-18-Jan16.pdf.

NOTE: Does NOT discuss risk communication, but does list 10 recommendations to improve the Ebola response, specifically port of entry screening. Mentions staff capacity in regard to knowing how to properly use PPE and other procedure to protect staff. Mentions need to better coordinate between several different government agencies.

Credibility: Moderate

United States Environmental Protection Agency (EPA) (2015). "Community Engagement and Case Analysis Methods for Developing Post-Incident Risk Communication Strategies for Intentional Biological Environmental Contamination Incidents--Final Report. ." Retrieved EPA/600/R-15/126, from https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=528739.

In addition to results of Phase 2 research activities, this report includes recommendations for post-incident decontamination and clearance communication that have been informed by findings. The recommendations include: the existence of clear response plans; involvement members of the media; culturally sensitive messages; and continued communication throughout recovery efforts. Strategies suggest a means for public health officials and emergency responders to communicate with stakeholders, the media, and the myriad publics they serve to support an understanding of post-contamination activities.

Implications for best practices:
1. Ensure that clear response plans exist and that they include clearly defined roles for those implicated in a crisis response and recovery, particularly regarding the decontamination and clearance phases of a crisis.
2. Crisis planning should involve, to the fullest extent possible, members of the media who will be charged with providing information to the public.
3. The importance of informed audience segmentation cannot be overstated.
4. The data from this phase supports the recommendation that the Best Practices model be expanded to include an additional practice, i.e., to communicate recovery efforts.

Credibility: High

Wilkinson, S. (2016). "Using media and communication to respond to public health emergencies: lessons learned from Ebola." from http://downloads.bbc.co.uk/mediaaction/pdf/practicebriefings/ebola-lessons-learned.pdf.

NOTE: Evidence-based messages (avoid contact with bodily fluids of infected & dead) were not distinguished from uncertain messages (eating bush meat). Lack of message coordination.

What worked was a consortium (SMAC) of actors working through local religious and community leaders, social mobilizers and local radio. The consortium ensured coordination not only of interventions, but also of messages. Also of import - creating messages to address people's concerns vs. strictly epidemiologically-oriented messages. Local, trusted voices, people locals relate to vs. distant experts. Radio drama.

Positive, constructive messages - treatment & survival possible, what they can do to limit disease spread vs. negative - incurable, untreatable, highly contagious. Encourage self-efficacy or no behavior change.

Also covers use of social media. Chat apps better than SMS because cheaper. What'sApp in particular. Also useful in tracking rumours.

Credibility: High

World Health Organization (2015). "Advisory Group on Reform of WHO's Work in Outbreaks and Emergencies, First Report, November 15th 2015." Retrieved 3 Jan 2017, 2017, from http://www.who.int/about/who_reform/emergency-capacities/advisory-group/first-report.pdf?ua=1.

4. The Advisory Group recommends the expansion of the current Emergency Response Framework to cover all phases of the emergency management cycle – preparedness, alert, response, recovery and prevention. The Framework should incorporate six critical functions that WHO must address when working on outbreaks and emergencies – (i) leadership for the health of all people; (ii) engagement with political leaders (when

necessary, beyond the Minister for Health); (iii) coordination (iv) scientific and technical expertise (backed by research and development); (v) information and communications; and (vi) facilitation of access to essential health services for people whose urgent needs are not being met by any other provider.

NOTE: Does not specifically address risk communication coordination.

Credibility: High

World Health Organization (2015). "Ebola Interim Assessment Panel Report by the Secretariat." Retrieved 30 Nov 2016, 2016, from http://apps.who.int/gb/ebwha/pdf_files/WHA68/A68_25-en.pdf.

NOTE: Report discusses the Ebola crisis, including communication and coordination issues, not in terms of what works and best practices, but in terms of what didn't work. Specifically mentions that community engagement was not handled well and that this contributed to the outbreak's spread. WHO should take the lead in coordinating response to health emergencies.

Many of the nongovernmental organizations that were on the ground in the affected countries, running development or humanitarian programmes, were faced with having to respond to a situation for which they were not well prepared; they lacked normative guidance and no adequate coordination mechanisms existed.

In WHO's own capacity in large-scale emergencies, the biggest skill gap continues to be found in the area of crisis coordination and leadership, and this needs to be addressed. Wherever possible, however, in-country coordination should be led by the governments of the affected countries themselves; this should include taking into account their own assessment of needs.

NOTE: No discussion of risk communication coordination.

Credibility: Moderate

World Health Organization (2015). "Ebola Virus Disease Preparedness: Taking Stock and Moving Forward." Retrieved 30 Nov 2016, 2016, from https://extranet.who.int/iris/restricted/bitstream/10665/152132/1/9789241508421_eng.pdf.

Specific issues included the need for cross border coordination of activities between the three affected countries and their neighbours; better coordination among partners supporting national plans of action; stronger community engagement in the process of preparedness and response; as well as the lack of capacities for alert and detection of potential cases. At the same time, representatives of the countries covered in this meeting outlined some of the challenges they face including the competing interests of on-going disease outbreaks and humanitarian crises, financial gaps and insecurity.

NOTE: Document mentions that Emergency Operations Centres should be established and that WHO should continue to lead coordination efforts through meetings and teleconferences.

Credibility: Moderate

World Health Organization (2015). "WHO Emergency Reform Workshop Report: Community Engagement." Retrieved 2 Jan 2017, 2017, from http://www.who.int/about/who_reform/emergency-capacities/er-community-engagement-26-27-nov-2015.pdf?ua=1.

NOTE: Document presents a thorough discussion of the nuts and bolts of community

engagement - who needs to be involved, timing, etc.

WHO's role in community engagement could include leading in some areas, working with others in ensuring key outcomes, coordinating interventions and "getting out of the way" in other instances.

The primary role of community engagement must rest with national governments and stakeholders. Therefore national and local capacity building must be supported.

Effective WHO involvement in community engagement must be geared to enable the international emergency response to be "socialized" or tailored to the local context. This will help build on national and locally owned action.

Credibility: Moderate

World Health Organization (2015). "WHO Emergency Reform Workshop report: Emergency Risk Communication." from http://www.who.int/about/who_reform/emergency-capacities/who-er-consultation-24-25-nov-2015.pdf?ua=1.

4.2 Coordination
As global health cluster lead, WHO should help to coordinate partners and their activities before, during and after health emergencies.

This will require WHO to:
· Develop platforms, systems and arrangements to support local – not just global - coordination and collaboration on outbreak and health emergency communication.
· Articulate common emergency risk communication goal(s) to unite multiple partners.
· Develop mechanisms for rapidly mapping who is doing what and where in communications including resources, needs, gaps and bottlenecks.
· Build strong relationships with partners and communities in quiet times, between outbreaks and health emergencies.
· Work collaboratively with partners and share visibility.
· Clarify the roles and responsibilities of partners regarding social mobilization, community engagement and other areas of emergency risk communication,
· Develop a MOU with UNICEF to clarify roles and responsibilities with regards to emergency risk communication, social mobilization and community engagement.

Overall building blocks for WHO's reform of emergency risk communication work.
1. Health communication and translational communication - so that WHO's technical teams can quickly scope, define and translate into understandable, contextualized format the science and technical knowledge of a particular emergency or threat throughout the risk management cycle.
2. Dynamic listening to peoples' concerns, fears and managing quickly rumours and misinformation at all levels and feeding into all types of communications and engagement using a range of methods
3. Public communication – communications teams at global, regional and country levels can use a range of communications approaches to ensure that key stakeholders – those affected as well as responders and their agencies – have access to and use the products of health communications and translational communications and be apprised of risks and their management.
4. Institutional communications – WHO fulfils its role as the global health agency by proactively keeping all relevant stakeholders, affected and not-directly-affected countries, informed real-time on the situation and what WHO is doing. This includes sitreps, Disease Outbreak News, IHR announcements, public communication from global through national levels on risks, their management using the best mix of channels.
5. Community engagement – This requires support for linking up with existing community engagement networks and mechanisms to reach, mobilize, engage with and

ultimately have community ownership of response action, and knowing what WHO should and should not do in CE

6. Support national governments and partners build in-country capacity - Include assessments to ascertain existing capacity, developing national strategies, plans and associated SoPs, testing the capacity through SIMEXEs or helping with after-action reviews following real events or emergencies so that strategies and plans are revised on a regular basis.

7. ERC operations – Build WHO's own capacity and expand its Emergency Communications Network to include all related expertise (i.e. sociologists, anthropologists and coordination expertise; as well as strategists and managers in this area). Deploy expertise as part of response teams and as part of the Global Emergency…

Credibility: Moderate

World Health Organization (2015). "WHO strategic response plan, West Africa Ebola Outbreak." Retrieved 1 Dec 2016, 2016, from http://apps.who.int/iris/bitstream/10665/163360/1/9789241508698_eng.pdf.

District coordination

To achieve these goals i*t is essential to further* strengthen district surveillance, risk assessment and response operations, and to ensure that each district has a flexible plan specific to their epidemiological situation and social / anthropological context. WHO will continue to play a lead role in the district-level coordination of the Ebola health response with field coordinators established in over 63 districts in the three affected countries. It is critical to ensure that timeliness and responsiveness of service delivery to families and communities remains a priority in order to build and maintain trust with communities.

Equally important is to maintain capacity at the national and district levels to respond rapidly to new outbreaks and areas of reinfection, as well as to reinforce cross-border collaboration. Districts adjoining international borders are strengthening cross-border operations with neighbouring districts to coordinate surveillance and information sharing and, if needed, contact tracing and other response operations.

Credibility: Moderate

World Health Organization (2016). "2014 Ebola virus disease outbreak and issues raise: follow-up to the Special Session of the Executive Board on the Ebola Emergency and the Sixty-eighth World Health Assembly." Retrieved 3 Jan 2017, 2017, from http://apps.who.int/gb/ebwha/pdf_files/EB138/B138_55-en.pdf.

NOTE: Document outlines plans for a new WHO entity to oversee health emergencies. Risk communication included as one of the major elements of this program.

The new WHO programme will have the following major elements:
• preparedness and technical assistance: infectious and all-hazard risk management, Member
State preparedness, WHO readiness (including the global health emergency workforce);
• emergency operations centres: surveillance, health emergency information and risk assessment, risk evaluation and response (including risk communications), operations support
and logistics;
• partnerships and external relations;
• core services: management and administration

Credibility: Moderate

World Health Organization (2016). "Implementation of the International Health Regulations (2005): Report of the Review Committee on the Role of the International Health Regulations (2005) in the Ebola Outbreak and Response." Retrieved 4 Jan 2017, 2017, from http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_21-en.pdf.

Recommendations

12. Our recommendations are organized into two groups: (i) a strategy to ensure implementation of the IHR based on new proposals (Recommendations 1–6); and (ii) improved delivery of the IHR by reinforcing existing approaches in IHR implementation (Recommendations 7–12). The following headline recommendations are supported by detailed recommendations addressed to WHO, States Parties and other stakeholders.

1. Implement rather than amend the IHR
There is neither the need for, nor benefit to be drawn from, opening up the amendment process for the IHR, at this time.

2. Develop a Global Strategic Plan to improve public health preparedness and response
The WHO Secretariat should lead the development of a Global Strategic Plan to improve public health preparedness, in conjunction with States Parties and other key stakeholders, to ensure implementation of the IHR, especially the establishment and monitoring of core capacities. The Global Strategic Plan should inform the development of regional office and national plans.

3. Finance IHR implementation, including to support the Global Strategic Plan
WHO, States Parties and international development partners should urgently commit to providing financial support at the national, regional and international levels for the successful implementation of the Global Strategic Plan.

4. Increase awareness of the IHR, and reaffirm the lead role of WHO within the UN system in implementing the IHR
Awareness and recognition of the IHR is improved within the UN system through the designation of an advocate. The key role of WHO in leading and governing implementation of the IHR should be reaffirmed.

5. Introduce and promote external assessment of core capacities
Self-assessment, complemented by external assessment of IHR core capacities, becomes recognised best-practice to monitor and strengthen the implementation of the IHR.

6. Improve WHO's risk assessment and risk communication
WHO establishes a standing advisory committee, which would have the primary purpose of regularly reviewing WHO's risk assessment and risk communication; creates an intermediate level of alert via a new category of risk that requires specific follow-up, called an International Public Health Alert (IPHA); and develops an updated communication strategy.

7. Enhance compliance with requirements for Additional Measures and Temporary Recommendations
States Parties should ensure that the public health response measures they implement comply with the IHR. To this end, WHO should increase transparency about Additional Measures adopted by States Parties, and publicity about Temporary Recommendations, and develop partnerships with international travel and trade organizations, and engage with other relevant private stakeholders.

8. Strengthen National IHR Focal Points
National IHR Focal Points should be centres with sufficient staff with experience,

expertise and seniority, and should be supported with the required resources (administrative, logistical and financial) to carry out all of their mandatory coordination and communication functions – as well as any other functions assigned by the State Party.

9. Prioritise support to the most vulnerable countries
WHO must prioritise support in establishing core capacities and the detection of public health risks to those countries that are either extremely low-resource, are in the midst of conflict, or those that are considered fragile.

10. Boost IHR core capacities within health systems strengthening
WHO and States Parties should ensure that all programmes to strengthen health systems specifically address IHR core capacities.

11. Improve rapid sharing of public health and scientific information and data
WHO champions the open sharing of information on public health risks, and expands guidance on global norms for sharing data to biological samples and gene sequence data during public health emergencies.

WHO and States Parties should ensure that sharing of samples and sequence data is balanced with benefit-sharing on an equal footing.

12. Strengthen WHO's capacity and partnerships to implement the IHR and to respond to health emergencies
WHO's ability to implement the IHR is strengthened through Secretariat reform and stronger partnerships, and significantly increased financial support from States Parties and other key stakeholders.

NOTE: Committee finds that the problem is not the IHR themselves, but the fact that they have not been implemented.

Credibility: HIGH

World Health Organization (2016). "Mission Report of the Independent Oversight and Advisory Committee: Colombia ". from http://who.int/about/who_reform/emergency-capacities/oversight-committee/colombia-mission-report.pdf.

(1) Implementation of the Programme
The IOAC team recognized that PAHO/AMRO has adopted the WHO reform and aligned structures both at the regional and country level. Since the reform reached PAHO/AMRO only a few months ago, the IOAC team considers that it is premature to assess "oneness" and whether the Programme has changed WHO's working in the current outbreaks and emergencies, and what other changes are planned.

(2) Effectiveness of WHO's response to the outbreak of Zika virus disease
The IOAC recognizes that the effectiveness of WHO's response at national and subnational levels in support of national health authorities contributes to the effectiveness of the health sector response. The IOAC team called attention to the fact that the WCO is well-staffed and closely working with the Ministry of Health and Social Protection under the strong leadership of the PWR. However, the WHE's critical functions (leadership, coordination, information management, and technical health operations) were already in place before the reform reached the WCO.

(3) Link between the reform and the effectiveness of WHO's response at the country level
The IOAC team acknowledges that the programme and its processes are still being built— having officially started on 1 July 2016. Therefore, it is premature to evaluate the link between the reform measures implemented thus far and the effectiveness of the

WCO's response.

(4) WHO's relations with different entities
The IOAC team observed that the WCO has good working relations with local partners built on the Colombian context. For the Zika response, the partners' coordination was led directly by the Government as it has long experience of working with UN bodies, NGOs, implementing agencies and other partners. PAHO/AMRO played an important leadership role among partners and supported the Government to lead the effective response.

(5) Country-specific coordination model and its impact on the effectiveness of the response
Colombia has an active Health Cluster but its role and contributions to the effectiveness of the Zika response is unclear. The IOAC team noted that the Zika response was led by the Government with strong support from PAHO/AMRO and the WCO.

(6) Programme's oneness component
The IMS was proved an effective working method to improve the Programme's oneness component, but it is unclear whether this has contributed to intersectoral coordination at country level. Again the WCO adopted the reform only a few months ago.

Credibility: Moderate

World Health Organization (2016). "Progress Report on the Development of the WHO Health Emergencies Programme 30 March 2016." Retrieved 3 Jan 2017, 2017, from http://www.who.int/about/who_reform/emergency-capacities/who-health-emergencies-programme-progress-report-march-2016.pdf?ua=1.

NOTE: Document provides details on the establishment of WHO's Health Emergency Programme. Budget information provided for the program, and disbursement details for Zika, etc. Does NOT provide information specific to risk communication funding. Notes that the program has responded to Yellow Fever, Zika, Cyclone Winston, etc. Response includes coordinating with other organizations.

Credibility: Moderate

World Health Organization (2016). "Second Report of the Advisory Group on Reform of WHO's Work in Outbreaks and Emergencies." Retrieved 3 Jan 2017, 2017, from http://www.who.int/about/who_reform/emergency-capacities/advisory-group/second-report.pdf?ua=1.

1. WHO's Member States and their people expect the Organization to provide leadership, support and expertise when public health is threatened by outbreaks and emergencies. WHO's mandate for working in outbreaks and emergencies must be reflected in every aspect of the Organization – its planning and budgeting of WHO, the capabilities of its staff and the focus of its governing bodies. This mandate is at the heart of WHO's identity.

2. In its work in outbreaks and emergencies, WHO has been regarded as insufficiently engaged on the ground, slow to deploy in crises, lacking in independence, overly political and poor at working in partnership with others. WHO must change these perceptions and improve its performance in order to restore public trust and confidence in the Organization's ability to deliver on its mandates. In its work on outbreaks and emergencies, WHO must demonstrate that it is an independent and impartial institution that gives priority to the health and well-being of all people, especially those who are vulnerable.

NOTE: Document presents further recommendations regarding WHO and its role in health emergencies. These pertain to its organization, its role in coordinating and back-

stopping responses, etc.

Credibility: Moderate

World Health Organization (2016). "Zika Strategic response plan quarterly update July-September 2016." from http://apps.who.int/iris/bitstream/10665/250626/1/WHO-ZIKV-SRF-16.4-eng.pdf?ua=1.

Controlling the spread of Zika virus requires a multi-faceted approach, which should not only be concerned with vector control, but also with protecting individuals, especially pregnant women and women and girls of reproductive age. This includes prevention from infection and unwanted pregnancies through supporting equitable access to sexual and reproductive health commodities and services. It also includes risk communication, providing useable and contextualized knowledge on Zika, and engaging communities to enable people and communities make informed decisions about their safety and health. Risk Communication and Community Engagement (RCCE) work is ongoing across the globe and being implemented by a number of partners.

RCCE coordination calls with partners are ongoing and provide a forum to identify and address challenges, misinformation, planning and progress. This mechanism helps align partners in the Zika RCCE response. Additionally, these coordination calls ask technical experts to provide briefs on evolving issues and new science and planning.

Social science networks have been engaged through the partner Anthrologica, to develop a resource pack to run Knowledge, Attitude and Practices (KAP) surveys. The pack, which was initially developed based on a request by governments in the Americas, is now being used by national authorities, public health and academic institutions as well as operational partners. RCCE materials have been developed including guidance and tools, as well as a Zika app for Android and iOS devices. This application is regularly updated to include the most recent information and evidence on Zika virus and the ongoing epidemic.

Social science research is an essential part of effective risk communication and community engagement for responding effectively to the ongoing Zika outbreak, as it is the case for any epidemic or pandemic. An interactive map was developed that provides an overview of such research.

Prevention activities are ongoing for the most at-risk groups, namely pregnant women, women of child-bearing age and their partners. Prevention strategies, including those for mass communication and community engagement, focus on the elimination of mosquito breeding sites, personal protection, prevention of sexual transmission of the virus and adequate information about Zika-related risks during pregnancy.

NOTE: Provides budget information for prevention, most of which is risk communication and community mobilization.

Credibility: High

Y Care International (2016). "Sierra Leone YMCA Ebola Outbreak Emergency Response Evaluation Report." Retrieved 30 Nov 2016, 2016, from http://1c8puy1lylrov7ssf1oz3o22.wpengine.netdna-cdn.com/wp-content/uploads/2016/03/SLYMCA-Ebola-Emergency-Response-Evaluation-Report.pdf.

NOTE: Presents YMCA's lessons learned from the Ebola outbreak response. Does not appear to address risk communication directly, but does deal with community engagement, collaboration and funding. Lack of funding hindered response activities at the beginning.

Community engagement is addressed at length. Community engagement methods used included radio jingles, pamphlets, posters, banners, music on the radio and at public meetings, participation in TV and radio talk shows, text messaging, public outreach events and door-to-door visits. Local young people served as volunteers for this outreach work, as were representatives from women's groups, tribal leaders, youth groups, herbal healers, student associations, rider & driver associations and market groups. This ensured local credibility and trust. Their effectiveness won them nomination to the Social Mobilization Pillar of the National Ebola Taskforce.

Coordination with other agencies was run through the National Ebola Taskforce, the National Ebola Response Center and the Ministry of Health. The Pull Slum Pan Pipal consortium was formed to ensure good collaboration in Freetown's slums.

Credibility: CASP - low; AACODS - Moderate

Q7: What are the elements and steps of effective, strategic communication planning?

ACF International (2015). "Community led Ebola management and eradication (CLEME)." Retrieved 9 Jan 2017, 2017, from http://reliefweb.int/sites/reliefweb.int/files/resources/Community%20Led%20Ebola%20Management%20and%20Eradication_Case_Study.pdf.

NOTE: Document provides detailed description of the CLEME process, including community mapping, collection of common ways of caring for people who are sick, simulating burials, walking through the community together, and re-visits for collecting feedback and adjusting the community action plan.

The CLEME process involved enabling communities to conduct their own analysis of the Ebola outbreak and what can and need to do about it, and providing technical assistance for implementing the communities' plans. Community support groups were formed, and visual tools and role games were used in order to ensure that all people could participate, regardless of literacy level. Topics covered included early detection of symptoms and early treatment, safe and dignified burials, avoiding body contact and body fluids, avoiding bush meat, accepting survivors, post-Ebola safe sex, and complying with contact tracing and quarantine.

Communities chose to create isolation rooms and install tippy taps for hand washing, and institute bi-laws to protect themselves. Implementation of by-laws was found to be particularly effective "when adopted at community level and decided by the community natural leaders."

Lessons learned and recommendations include: 1. On-going contextual analysis to address barriers and challenges faced by communities and adapt interventions accordingly. 2. Interventions need to address the differing needs of women, men, boys and girls.
3. Regular follow-up and feedback are needed to adapt the program to the changing situation. 4. Integrate Ebola and other health education into all community programs to prevent future outbreaks.

Credibility: Moderate

Aille, M.-P., et al. (2016). "OCB EBOLA REVIEW Part 1: Medico-operational ". Retrieved 12 Jan 2017, 2017, from http://cdn.evaluation.msf.org/sites/evaluation/files/attachments/ocb_ebola_review_medop_final_2.pdf.

The approach of proactive community/survivor engagement was empowering, and restored dignity to patients and communities. However, use of MSF anthropological assessments was initiated too late in the intervention. In addition, more timely analysis of these assessments, and sharing of results with the field, could have supported response teams in adapting their approaches and tools earlier in the outbreak.

NOTE: Document covers health promotion (the term risk communication is not used, but the idea is there) in depth p. 38-46. Discusses how medical anthropology should have been used at the outset. The same for community engagement, participation in development of messages, more cultural adaptation, etc.

Credibility: High

Anoko, J. N. (ND). "Communication with rebellious communities during an outbreak of Ebola Virus Disease in Guinea: an anthropological approach." Retrieved 2 Dec 2016, 2016, from http://www.ebola-anthropology.net/wp-content/uploads/2014/12/Communicationduring-an-outbreak-of-Ebola-Virus-Disease-with-rebellious-communities-in-Guinea.pdf.

This paper reports on the success of a communication programme among 26 rebellious villages in Forest Guinea during fieldwork in June-July 2014. This was based on listening to complaints and taking into account the customs and culture of those concerned. The main methodologies were socio-anthropological enquiry and action research, based on bibliographic research, observations, formal and informal interviews with resource persons and political leaders from Forest Guinea; women, young and very old people of both sexes, street vendors, restaurateurs, local personal response.

Social-anthropological inquiry and action research on the ground were the main methodologies used, and this was based on bibliographic research, observations, formal and informal interviews with resource persons and political leaders from the Forest Guinea; women, young and very old people of both sexes, street vendors, restaurateurs, local response personnel, traditional healers, among others.

This article highlights the contribution that anthropology can make in the establishment of communication rooted in a consideration of local circumstances, knowledge and the enhancement of regional cultures.

NOTE: Importance of involving local leadership (traditional, religious, different groups, motorcycle taxis). Also note about messages of no vaccine, no treatment creating fear. No reason to go to treatment centres. Would rather die at home. Rumours.

Credibility: Moderate

Assessment Capacities Project (ACAPS) (2015). "Ebola Outbreak, Liberia: Communication: Challenges and Good Practices." from https://www.acaps.org/sites/acaps/files/products/files/u_liberia_communication_challenges_and_good_practices_dec_2015-ilovepdf-compressed_ul.pdf.

Lessons learned:
+ Prioritise communication early in the response: For many KIs, funding for social mobilisation activities and a focus on “bottom-up” community engagement campaigns came too late (PI 07/09/2015, PI 18/11/2015).
They argue that it was only after the number of Ebola cases was threatening the stability of Liberia, that authorities started engaging community leaders and producing more targeted guidance (ICG, 28/10/2015, PI, 30/09/2015, Al Jazeera, 24/10/2014).

Credibility: High

Davis, T. and A. e. Srinivasan (2016). "Ebola Barrier Analysis Compendium: Summary of Barrier Analysis Studies on Ebola-related Behaviors ". Retrieved 12 Jan 2017, 2017 from http://www.fsnnetwork.org/sites/default/files/BA_Ebola_Compendium.pdf.

The key determinants that would need to be addressed in future outbreaks in Liberia and Sierra Leone include perceived self-efficacy, perceived social norms, access, cues for action, and perceived positive and negative consequences of the behavior (including social stigmatization). We can see from the results of these studies that several factors can affect uptake of a behavior including presence of trusted community leaders, access to communication, and cultural, social and political factors.

To prevent similar epidemics in the future, results from these BA studies (and future ones) can be used to design behavior promotion messages and activities which are persuasive and that fit the lives, circumstances and worldview of community members. By comparing those who have already adopted a given behavior (the Doers) to those who have not (Non-doers), Barrier Analysis has become another tool in our toolkit of “assets-based” methods that draw on the local wisdom of communities, allowing program planners to use that wisdom to help communities adopt behaviors that increase their

resilience and response to crises such as Ebola.

Credibility: High

De Roeck, D. (2016). "Guidance Note on the Use of Oral Cholera Vaccines." from http://www.plateformecholera.info/attachments/article/286/Guidance%20Note%20on%20the%20Use%20of%20Oral%20Cholera%20Vaccines%20-%20FULL%2042616.pdf.

• Discussing the upcoming campaign with community leaders and members and conducting a rapid communications assessment is essential to develop effective communication messages and social mobilization strategies; identify the best channels of communication to use; and identify barriers and other unanticipated problems that can potentially derail a campaign as well as provide possible solutions.
• Well-trained social mobilizers can serve as “ears on the ground” to detect and report any rumours or misinformation about the vaccination, which need to be dealt with promptly;

Credibility: High

DuBois, M., et al. (2015). "The Ebola response in West Africa: Exposing the politics and culture of international aid." Retrieved 1 Dec 2016, 2016, from https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9903.pdf.

Issues around communication, community engagement and trust also marred the early phases of the response. Top-down communication sidelined the communities whose engagement was essential in enabling people to protect themselves and others from infection; reduce fear and mistrust of and resistance to health authorities and stigmatisation; prevent transmission of the disease; develop safe, supportive practices of care for the ill or those at risk of infection; and develop safe and supportive burial practices. The early stages of the surge did not prioritise such engagement or capitalize on affected communities as a resource, but treated them more as a problem – a security risk, hidebound by culture, unscientific – to be overcome.

People, in particular rural populations, were stereotyped in the media as irrational, fearful, violent and primitive: as too ignorant to change. Such stereotypes feed paternalism and the view that Africans lack agency, are unable to help themselves and hence require foreign assistance. This dovetails with a self-perception of humanitarian action as ‘saving’ helpless victims – reinforced in turn by a media focus on the international response to Ebola, despite the evident fact that the vast majority of the effort on the ground was local. The result is a predisposition in the aid system towards control and an inflated sense of its own importance, rather than responses and strategies that engage with and rely on communities.

Credibility: High

Fielding, J., et al. (2016). "Report of the Independent Panel on the U.S. Department of Health and Human Services (HHS) Ebola Response." from https://www.phe.gov/Preparedness/responders/ebola/EbolaResponseReport/Documents/ebola-panel.pdf.

Ensure that HHS communicates effectively with the public.
HHS should clarify its strategy for communicating risk-related information to the public, to Congress, and to other stakeholders during responses to urgent public health threats.
• HHS should develop a public communication framework that conveys the critical concepts of public health response and that fully integrates crisis and emergency risk-communication principles. (Finding #5)
• HHS should develop basic messaging for specific issues and actions that are likely to occur in serious public health crises (e.g., disease transmission, treatment decisions, triage, waste management, radiation exposure). These messages can be leveraged to

develop communications during emergencies. The messages should be cleared in advance; HHS
should consider coordinating the development of messages with the U.S. Department of Homeland Security, the American Red Cross, and other relevant agencies to encourage consistency in messaging to the public. HHS should also prepare to repeatedly communicate these concepts to the public using traditional media and social networking/digital messaging
platforms. (Finding #5)
• HHS should identify and train a cadre of personnel from across HHS to be potential spokespersons during public health and medical emergencies. These personnel should have public health expertise and a thorough understanding of health crisis/risk communication. They should receive training in these concepts annually, at a minimum. (Finding #5)
• HHS should establish a clear, systematic, and rapid way for messages to be reviewed and cleared that enables timely and relevant communication with the public. The Department must also exchange and verify information with internal and external response partners, and be prepared to supplement or correct information if the facts are misconstrued or conveyed improperly. (Finding #5)
• HHS should set clear expectations for what good risk communication can and cannot accomplish (e.g., it cannot compensate for poor operational response). (Finding #5)

HHS should encourage and support state and local public health departments that want to build their capacity to communicate risk-related information in a crisis or emergency.
• The HHS public communication framework should extend beyond individuals and administrations to form the basis for a common information system for public health at all levels. At a minimum, HHS should provide annual training on the framework to decision-makers and potential spokespersons for domestic and international responses to ensure that it is understood and adopted. (Finding #5)
• HHS should support state-level communications networks to extend this capacity. (Finding #5)
• HHS should consider developing the capacity to convene outside advisory expertise in risk communication, as needed, to provide additional support and perspectives, both for preparedness and for response. (Finding #5)

Credibility: High

Institute of Development Studies (IDS) (ND). "Africa APPG inquiry: Community led health systems & the Ebola outbreak." Retrieved 9 Jan 2017, 2017, from http://www.ebola-anthropology.net/wp-content/uploads/2015/07/Africa-APPG-inquiry-IDS-submission.pdf.

Effective responses need to be organised around meaningful collaboration from the beginning, in ways that involve local people and local knowledge in designing response strategies in partnership with biomedical, social science and other expertise. Considering all of this, radically greater investment is needed to learn from and support successful local response capacity, and to demonstrate how substantive collaborations can be realised at scale. In order to ensure that interventions are appropriate, inclusive, and relevant to context, local experience, knowledge and perspectives on containing infectious diseases should be at the centre of public health and biomedical response strategies.

'Culturalist' assertions and dismissive discourses misdiagnose the problem and limit the scope
for meaningful community engagement. An effective response needs to be able to recognise
and support local organisation, and to address people's fears and the sources of their distrust.

NOTE: Although no date appears on the document itself, Anthropology platform website listed 2015 as the date for this document.

Credibility: Moderate

Schoch-Spana, M., et al. (2016). "How to Steward Medical Countermeasures and Public Trust in an Emergency – A Communication Casebook for FDA and Its Public Health Partners ". from http://www.upmchealthsecurity.org/our-work/pubs_archive/pubs-pdfs/2016/MCMCommCasebookJune102016.pdf.

3. Build pre-crisis partnerships and alliances with other stakeholder entities to coordinate communication resources and activities, enlist their help in better understanding and reaching target audiences, and establish trusted links that can be activated during the crisis period.

4. Accept the public as a legitimate partner in managing an emergency. Recognize the public's right to know the risks that it faces as well as protective actions that it can take, and plan for the prompt sharing of this information so that people can freely carry out their own informed decisions.

5. Listen to the public before and during the emergency. Find out what people know, think, or want done about risks, and use this to inform communication and emergency response planning. Acknowledge people's concerns, even if they do not conform to scientific risk assessments. Put yourself in their place and adapt messages.

10. Meet the needs of the media and remain accessible. Plan to work diligently with the media before and during an incident knowing that members of the public often rely on news outlets to learn about a crisis or risk.

NOTE: Emphasizes the importance of communication partnerships and building/maintaining them outside emergencies. Mentions broadening media to include social media. Adapt messages to reach wider audience.

Credibility: High

Sugg, C. (2016). "Coming of age: communication's role in powering global health." Retrieved 4 Jan 2017, 2017, from http://downloads.bbc.co.uk/mediaaction/policybriefing/role-of-communication-in-global-health-report.pdf.

This critical interplay between human health and communication has now been recognised in assorted global and national health policies on paper. However, when it comes to funding allocation and the ways in which health programmes are implemented on the ground, clear deficits can be seen. Too often, health communication is poorly funded, under-utilised and badly planned, bolted on to programmes as an apparent afterthought. This needs to change if progress towards a healthier world is to be accelerated.

In addition to the limited funding for well-planned health communication efforts, programmes have not consistently integrated lessons learned from past practice. Successful health communication programmes have shown the importance of underpinning interventions with sound behavioural analysis, rooted in socioecological understanding of change and new insights from behavioural science. They have also shown the need to move beyond the idea of health communication as top-down "messaging" to something that encompasses dialogue and respects the opinions of those most affected by particular health challenges. Too often, however, these key ingredients are missing.

NOTE: Recommendations include making social and behavioural change communication

an integral part of health programs, using longer-termed, multi-pronged approaches; increased funding for SBCC research - make sure lessons learned are compiled and applied; create an institutional "home" for health communication; and increase health communication capacity in governments & civil society organizations.

Credibility: High

Turner, M. M., et al. (2016). "Ebola risk communication project in Liberia: Lessons in crisis communication." from http://healthcommcapacity.org/wp-content/uploads/2016/09/GW-Report-Ebola-Risk-Communication-Project-LIberia_Lessons-in-Crisis-Communication1.pdf.

This 109-page report documents the work of the Health Communication Capacity Collaborative's Ebola Risk Communication project in Liberia, and details the project's goals of understanding and documenting Ebola-related communication efforts in the country to better inform communication approaches to future crises. This resulted in the development of a codebook that was then applied in order to further analyze the messages communicated across various media sources.

Recommendations:
1) Engage in pre-crisis planning - SMS rumour monitoring system; media meetings for lessons learned & how to do better next time
2) Express compassion, concern, empathy - from all levels of leadership and in messages; train responders in this
3) Forge public partnerships - media should provide info on what people can do to help respond
4) Listen to and understand the concerns of the public - media should specifically invite public response and feedback; engage them in the dialog process
5) Communicate honesty, candor, openness - when citing expertise, also need to indicate trustworthiness; train media about how to convey trustworthiness
6) Accept uncertainty and ambiguity - communicate about this, rather than certainty with no room for nuance
7) Regard crisis communication as an on-going process & communicate this
8) Collaborate & coordinate with credible sources
9) Communicate self-efficacy and response-efficacy - helping people know what actions to take, believe that they are capable of taking those actions, and that those actions will have a positive effect

Credibility: High

United States Department of Health and Human Services and Office of the Assistant Secretary for Preparedness and Response (2016). "U.S. Department of Health and Human Services Ebola Response Improvement Plan." from https://www.phe.gov/Preparedness/responders/ebola/Documents/EbolaIP.pdf.

4. Risk Communication
To strengthen risk communications, HHS will:
4.1 Develop/codify a Department-wide strategy for communicating risk information to the public during any domestic or international public health emergency, urgent health threat, or health-related incident that may be perceived to pose a significant risk to healthcare providers or the public. The framework should institutionalize the use of crisis and emergency risk communication principles. [Office of the Assistant Secretary for Public Affairs (ASPA), CDC]
4.2. Identify and train a cadre of personnel from across HHS that have public health expertise and a thorough understanding of, and fluency in, health crisis and risk communications to serve as spokespersons during domestic or international public health and medical emergencies. This training can draw upon a body of work developed since the 9/11 terrorist attacks. [ASPA]
4.3. Develop a mechanism to augment steady state crisis and risk communication staff,

as needed. [ASPA, CDC]

Credibility: Moderate

United States Environmental Protection Agency (EPA) (2015). "Community Engagement and Case Analysis Methods for Developing Post-Incident Risk Communication Strategies for Intentional Biological Environmental Contamination Incidents--Final Report. ." Retrieved EPA/600/R-15/126, from https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=528739.

The recommendations include: the existence of clear response plans; involvement members of the media; culturally sensitive messages; and continued communication throughout recovery efforts. Strategies suggest a means for public health officials and emergency responders to communicate with stakeholders, the media, and the myriad publics they serve to support an understanding of post-contamination activities.

4. A media toolkit is needed to better prepare journalists to understand environmental and health crises, communicate their potential impacts, and provide necessary response information to communities of concern.

Implications for best practices:
1. Ensure that clear response plans exist and that they include clearly defined roles for those implicated in a crisis response and recovery, particularly regarding the decontamination and clearance phases of a crisis.
2. Crisis planning should involve, to the fullest extent possible, members of the media who will be charged with providing information to the public.
3. The importance of informed audience segmentation cannot be overstated.
4. The data from this phase supports the recommendation that the Best Practices model be expanded to include an additional practice, i.e., to communicate recovery efforts.

Credibility: High

Wilkinson, S. (2016). "Using media and communication to respond to public health emergencies: lessons learned from Ebola." from http://downloads.bbc.co.uk/mediaaction/pdf/practicebriefings/ebola-lessons-learned.pdf.

NOTE: Document notes that communication was not prioritized at the beginning. Local media was not informed and trained on how to cover the outbreak. Building local media capacity would have been good as they speak local languages, dialects, etc. Local radio is particularly widespread. Rather than viewing local media merely as a means to distribute top-down messages, they could and should have been used for debate forums, addressing specific concerns and holding leaders accountable.

Evidence-based messages (avoid contact with bodily fluids of infected & dead) were not distinguished from uncertain messages (eating bush meat). Lack of message coordination.

What worked was a consortium (SMAC) of actors working through local religious and community leaders, social mobilizers and local radio. The consortium ensured coordination not only of interventions, but also of messages. Also of import - creating messages to address people's concerns vs. strictly epidemiologically-oriented messages. Local, trusted voices, people locals relate to vs. distant experts. Radio drama.

Positive, constructive messages - treatment & survival possible, what they can do to limit disease spread vs. negative - incurable, untreatable, highly contagious. Encourage self-efficacy or no behavior change.

Also covers use of social media. Chat apps better than SMS because cheaper.

What'sApp in particular. Also useful in tracking rumours.

Credibility: High

World Health Organization (2015). "WHO Emergency Reform Workshop report: Emergency Risk Communication." from http://www.who.int/about/who_reform/emergency-capacities/who-er-consultation-24-25-nov-2015.pdf?ua=1.

4.1 National capacity building
Building national and local capacity which is sustainable must be a key driver of WHO communication activities throughout all phases of an emergency, namely before, during and after outbreaks or health emergencies.

This will require WHO to:
· Strengthen communication capacity at all levels of WHO (country, regional and headquarter levels). This includes recruiting staff, training and developing SOPs for its implementation.
· Engage senior government decision makers to prioritise ERC as an essential element of outbreak and health emergency preparedness and response, starting in “peace times” preparedness, readiness, and recovery phases)
· Identify stakeholders across different sectors for risk communication capacity building
· Involve those who engage with communities on a regular basis so that these mechanisms and networks can be readily activated and leveraged during emergencies
· Support national governments to assess, develop and implement national ERC capacity building plans.

4.2 Coordination
As global health cluster lead, WHO should help to coordinate partners and their activities before, during and after health emergencies.

This will require WHO to:
· Develop platforms, systems and arrangements to support local – not just global - coordination and collaboration on outbreak and health emergency communication.
· Articulate common emergency risk communication goal(s) to unite multiple partners.
· Develop mechanisms for rapidly mapping who is doing what and where in communications including resources, needs, gaps and bottlenecks.
· Build strong relationships with partners and communities in quiet times, between outbreaks and health emergencies.
· Work collaboratively with partners and share visibility.
· Clarify the roles and responsibilities of partners regarding social mobilization, community engagement and other areas of emergency risk communication,
· Develop a MOU with UNICEF to clarify roles and responsibilities with regards to emergency risk communication, social mobilization and community engagement.

Overall building blocks for WHO’s reform of emergency risk communication work.
1. Health communication and translational communication - so that WHO’s technical teams can quickly scope, define and translate into understandable, contextualized format the science and technical knowledge of a particular emergency or threat throughout the risk management cycle.
2. Dynamic listening to peoples’ concerns, fears and managing quickly rumours and misinformation at all levels and feeding into all types of communications and engagement using a range of methods
3. Public communication – communications teams at global, regional and country levels can use a range of communications approaches to ensure that key stakeholders – those affected as well as responders and their agencies – have access to and use the products of health communications and translational communications and be apprised of risks and their management.

4. Institutional communications – WHO fulfils its role as the global health agency by proactively keeping all relevant stakeholders, affected and not-directly-affected countries, informed real-time on the situation and what WHO is doing. This includes sitreps, Disease Outbreak News, IHR announcements, public communication from global through national levels on risks, their management using the best mix of channels.
5. Community engagement – This requires support for linking up with existing community engagement networks and mechanisms to reach, mobilize, engage with and ultimately have community ownership of response action, and knowing what WHO should and should not do in CE
6. Support national governments and partners build in-country capacity - Include assessments to ascertain existing capacity, developing national strategies, plans and associated SoPs, testing the capacity through SIMEXEs or helping with after-action reviews following real events or emergencies so that strategies and plans are revised on a regular basis.
7. ERC operations – Build WHO's own capacity and expand its Emergency Communications Network to include all related expertise (i.e. sociologists, anthropologists and coordination expertise; as well as strategists and managers in this area). Deploy expertise as part of response teams and as part of the Global Emergency…

Credibility: Moderate

Q8: What are the best ways and most appropriate tools for gathering, analyzing, and interpreting emergency risk communication data and feedback and integrating results into emergency risk communication planning, strategy development, execution and evaluation?

ACF International (2015). "Community led Ebola management and eradication (CLEME)." Retrieved 9 Jan 2017, 2017, from http://reliefweb.int/sites/reliefweb.int/files/resources/Community%20Led%20Ebola%20Management%20and%20Eradication_Case_Study.pdf.

The Community Led Ebola Management and Eradication (CLEME) process involved enabling communities to conduct their own analysis of the Ebola outbreak and what can and need to do about it, and providing technical assistance for implementing the communities' plans. Community support groups were formed, and visual tools and role games were used in order to ensure that all people could participate, regardless of literacy level. Topics covered included
early detection of symptoms and early treatment, safe and dignified burials, avoiding body contact and body fluids, avoiding bush meat, accepting survivors, post-Ebola safe sex, and complying with contact tracing and quarantine. Revisits were used to monitor the program, collect feedback and adjust interventions accordingly.

Credibility: Moderate

Savoia, E. and K. Viswanath (2015). "RICE – RIsk Communications Evaluation." from https://www.yumpu.com/en/document/view/31171296/rice-risk-communications-evaluation/6.

Participants in this study expressed a lack of evidence about the effectiveness of different types of risk communication, as well as a lack of methodological frameworks and tools to evaluate risk communication. They also noted that each country is at a different level, making comparative analysis difficult. Still, several aspects of risk communication lend themselves to measurement: the time between threat perception and message release, the time between message release and public uptake, and the level of coordination with stakeholders and across units. Data can also be collected about how the message was delivered, received and acted on. Efficiency could be measured in terms of time saved, political pressure reduced and minimized media incidents. Effectiveness would be measured with KAP studies. These types of measurements should be taken before, during and after emergencies, to establish a baseline and to determine if messages need to be adjusted, as well as overall performance. Methods for evaluation included focus groups, interviews, KAP and other population surveys, opinion surveys and media/social media monitoring.

Credibility: High

Sugg, C. (2016). "Coming of age: communication's role in powering global health." Retrieved 4 Jan 2017, 2017, from http://downloads.bbc.co.uk/mediaaction/policybriefing/role-of-communication-in-global-health-report.pdf.

Many public health professionals perceive the overall quantity of evidence around health communication to be poor compared with that available for other types of health intervention.

NOTE: Evidence gaps and misalignments exist and apparently little demand for rigorous research exists. In addition, funding for risk communication evaluation has diminished. When studies are performed, the tendency is to focus on numbers of people reached, rather than on whether behavior actually changed. Plus there is disagreement about what types of studies are acceptable.

Increasingly, health communication practitioners are deploying quasi-experimental research designs to assess impact. Interrupted time series analysis and studies that use

statistical controls like propensity score matching to reduce the potential bias of confounding variables are allowing practitioners to make claims of plausible attribution. More and more, these approaches – combined with qualitative research that can help to contextualise quantitative findings – are seen to represent best practice in health communication evaluation. But they are still rated less highly than experimental research in the formal grading processes used in mainstream public health.116

Credibility: High

Q9: What are the best ways to engage communities in emergency risk communication activities to respond to events/contexts?

ACF International (2015). "Community led Ebola management and eradication (CLEME)." Retrieved 9 Jan 2017, 2017, from http://reliefweb.int/sites/reliefweb.int/files/resources/Community%20Led%20Ebola%20Management%20and%20Eradication_Case_Study.pdf.

> NOTE: Document provides detailed description of the CLEME process, including community mapping, collection of common ways of caring for people who are sick, simulating burials, walking through the community together, and re-visits for collecting feedback and adjusting the community action plan.
>
> The CLEME process involved enabling communities to conduct their own analysis of the Ebola outbreak and what can and need to do about it, and providing technical assistance for implementing the communities' plans. Community support groups were formed, and visual tools and role games were used in order to ensure that all people could participate, regardless of literacy level. Topics covered included early detection of symptoms and early treatment, safe and dignified burials, avoiding body contact and body fluids, avoiding bush meat, accepting survivors, post-Ebola safe sex, and complying with contact tracing and quarantine.
>
> Communities chose to create isolation rooms and install tippy taps for hand washing, and institute bi-laws to protect themselves. Implementation of by-laws was found to be particularly effective "when adopted at community level and decided by the community natural leaders."
>
> Lessons learned and recommendations include: 1. On-going contextual analysis to address barriers and challenges faced by communities and adapt interventions accordingly. 2. Interventions need to address the differing needs of women, men, boys and girls. 3. Regular follow-up and feedback are needed to adapt the program to the changing situation. 4. Integrate Ebola and other health education into all community programs to prevent future outbreaks.

Adams, V., et al. (2016). "OCB Ebola Review: Summary Report." Retrieved 12 Jan 2017, 2017, from http://cdn.evaluation.msf.org/sites/evaluation/files/attachments/ocb_ebola_review_summary_report_final_3.pdf.

> LESSON LEARNED: When reducing transmission of a highly contagious disease is a programmatic objective, appropriate investment towards community acceptance and behaviour change is essential. Starting health promotion efforts early and linking them to local communication directly improves programme effectiveness. Socio-cultural assessments must be conducted and used timely.
>
> LESSON LEARNED: Where community fears of a disease are high, and acceptance of an intervention is at stake, MSF must integrate dedicated staff for local communications from the very beginning of a response. A proper analysis of the cultural understanding, needs and dynamics must take place and strategies be developed accordingly and in good interaction with health promotion.

Aille, M.-P., et al. (2016). "OCB EBOLA REVIEW Part 1: Medico-operational". Retrieved 12 Jan 2017, 2017, from http://cdn.evaluation.msf.org/sites/evaluation/files/attachments/ocb_ebola_review_medop_final_2.pdf.

> This review identified clear differences in Health Promotion (HP) outcomes, depending on the level of investment made. Activities within communities demonstrated several

weaknesses in strategic design, timely implementation, and monitoring and evaluation. While HP was part of the work at ETCs from the onset, outreach and community activities were not consistently rolled out; in some locations it took several weeks after ETCs opened for the latter to become operational. While this is largely explained by HR constraints, it also partly reflects the lower overall priority given to HP within MSF, the delay in availability of comprehensive HP guidance documents, and missing links to establishing effective communication with communities. MSF's decision to train other actors on HP had far-reaching, positive implications: in addition to improved relations among actors on the ground, these trainings resulted in better harmonisation of messages across the different actors, and in helping training participants become agents of change.

The approach of proactive community/survivor engagement was empowering, and restored dignity to patients and communities. However, use of MSF anthropological assessments was initiated too late in the intervention. In addition, more timely analysis of these assessments, and sharing of results with the field, could have supported response teams in adapting their approaches and tools earlier in the outbreak.

NOTE: Document covers health promotion (the term risk communication is not used, but the idea is there) in depth p. 38-46. Discusses how medical anthropology should have been used at the outset. The same for community engagement, participation in development of messages, more cultural adaptation, etc.

Credibility: High

Anoko, J. N. (ND). "Communication with rebellious communities during an outbreak of Ebola Virus Disease in Guinea: an anthropological approach." Retrieved 2 Dec 2016, 2016, from http://www.ebola-anthropology.net/wp-content/uploads/2014/12/Communicationduring-an-outbreak-of-Ebola-Virus-Disease-with-rebellious-communities-in-Guinea.pdf.

This paper reports on the success of a communication programme among 26 rebellious villages in Forest Guinea during fieldwork in June-July 2014. This was based on listening to complaints and taking into account the customs and culture of those concerned. The main methodologies were socio-anthropological enquiry and action research, based on bibliographic research, observations, formal and informal interviews with resource persons and political leaders from Forest Guinea; women, young and very old people of both sexes, street vendors, restaurateurs, local personal response.

This article highlights the contribution that anthropology can make in the establishment of communication rooted in a consideration of local circumstances, knowledge and the enhancement of regional cultures.

In an effort to communicate on the basis of knowledge of the local culture (the bottom-up approach), it was necessary to analyse the social organization to categorize and understand the barriers in getting the message to the audience. Given the conflictual situation, the strategy was to focus on the credibility and influence of each of the social groups in the community. For example, a young entrepreneur from the capital Conakry was considered influential and credible in Guéckédou thanks to his sponsorship, his regular presence among the community and his investments that provide employment to the people of his region.

The assumption was that the sources of information to be used were not only institutional ones (political, medical and administrative authorities, community leaders, religious leaders), or those who self-designate as such (the leaders of revolt).

The social -anthropological analysis of social organization highlighted the importance for mobilization, specifically, of traditional practitioners, heads of the sacred forests, religious

leaders (Christians and Muslims), circumcisers, village birth attendants, hunters, youth in general through the consultative Framework youth nationals, returned migrants from the city or in other countries, and the elders.

Credibility: Moderate

Assessment Capacities Project (ACAPS) (2015). "Ebola Outbreak, Liberia: Communication: Challenges and Good Practices." from https://www.acaps.org/sites/acaps/files/products/files/u_liberia_communication_challenges_and_good_practices_dec_2015-ilovepdf-compressed_ul.pdf.

This 15-page document is the first of two reports that look at lessons learned and good practice in community-led communication processes during the Ebola outbreak. It covers the changing behaviors of the affected population in Liberia during the outbreak, the most effective channels for reaching communities, the most trusted actors for information delivery, and the adaptation of messaging to the needs of affected populations. These insights suggest ways to better address communication needs in future outbreaks and in humanitarian emergencies.

Key findings:
+ Funding for social mobilisation activities and focus on “bottom-up” community led-engagement campaigns came too late. These should have started at the onset of the emergency.
+ Radio stations were the first and most widespread source of information on Ebola for the majority of Liberians.
+ The increasing involvement of anthropologists helped better understand and address the socio-cultural and political dimension of the outbreak.
+ Liberians were often more afraid of the religious consequences of changing their behaviour than of catching Ebola. As a result, trusted community and faith leaders played a key role in containing the epidemic.
+ Disconnected top-down messaging approaches were largely ineffective. Two-way communication must be encouraged to better understand and respond to the concerns of local communities.

Lessons learned:
+ Prioritise communication early in the response: For many KIs, funding for social mobilisation activities and a focus on “bottom-up” community engagement campaigns came too late (PI 07/09/2015, PI 18/11/2015).
They argue that it was only after the number of Ebola cases was threatening the stability of Liberia, that authorities started engaging community leaders and producing more targeted guidance (ICG, 28/10/2015, PI, 30/09/2015, Al Jazeera, 24/10/2014).
+ Use mass media: Radio stations were the first and most widespread source of information on Ebola for the majority of Liberians, and a strategic channel to relay health messages. 93% of respondents reported that they first learned about Ebola through the radio (KAP survey, MoH, 03/2015). Providing targeted training and mentoring to community radio station to further improve and diversify their content can help address issues linked to Ebola in both the crisis and the recovery phase(BBC Media action, 23/03/2015, IREX, 2015).

+ Understand and adapt to the local context: In Liberia the collective trauma associated with the civil war continues to deeply influence the way people relate to and interpret official information. In addition, there are 16 major ethnic groups, 20 indigenous languages and a diverse range of oral traditions. Anthropologists played a pivotal role in helping responders better understand and address some of the socio-cultural and political dimensions of the Ebola outbreak.

+ Put faith leaders at the forefront of the response: During the outbreak there were times

where surveys revealed a rapid progression of the virus despite high basic awareness of Ebola and prevention methods (CDC, 10/2014). Research shows that Liberians were more afraid of the religious consequences of changing their behaviour than of catching Ebola. As a result, trusted community and faith leaders played a key role in containing the epidemic and should be at the forefront in all phases of the response.

+ Make use of story-telling and entertainment education: Research suggests that communications which capture the imagination were more effective outreach tools, as people who were engaged in a storyline were more open to both receiving information and to changing their attitudes and behaviours. This was particularly the case in the Ebola outbreak, especially among communities used to communicating orally. It provides an opportunity to embed key messages and leverages a traditional form of communication within that culture. (IOM,
07/01/2015).

+ Take a gender specific approach: Preliminary data suggests that women died in greater numbers than men at the beginning of the outbreak, due to their traditional role as caregivers and because they had less access to communication channels (UN Women, 10/2014, Huffington Post, 15/10/2014). Analyses of previous Ebola outbreaks in Central and Eastern Africa indicate the role of gender-related factors as key determinants of exposure and infection. More effort could have been made to mainstream gender into health information campaigns (Harvard, 06/2015). This includes interventions through the radio, a key tool for reaching isolated, often
illiterate women (UN Women, 10/2014).

+ Adapt top-down messaging to the needs of communities: Disconnected top-down health messaging approaches were largely ineffective. Key messages needed to be practical and relevant to the communication needs of affected communities. Feedback mechanisms and two-way communication must be encouraged to better understand and respond to the concerns of communities.

Credibility: High

Assessment Capacities Project (ACAPS) (2015). "Ebola Outbreak, Sierra Leone: Communication: Challenges and Good Practices." from https://www.acaps.org/sites/acaps/files/products/files/v_sierra_leone_communication_challenges_and_good_practice_dec_2015_2-ilovepdf-compressed_ul.pdf.

This 16-page document is the second of two reports that look at lessons learned and good practice in community-led communication processes during the Ebola outbreak. It covers the changing behaviors of the affected population in Sierra Leone during the Ebola outbreak, the most effective channels for reaching communities, the most trusted actors for information delivery, and the adaptation of messaging to the needs of affected populations. These insights suggest ways to better address communication needs in future outbreaks and in humanitarian emergencies.

Key findings:
+community-led communication and social mobilisation were instrumental in achieving behaviour change.
+ Radio was the preferred means for receiving information for 85% of the population, followed by house-to-house visits, televisions and religious venues.
+ The opinion of faith leaders was held in high regards. Mosques and churches, became critical channels for the dissemination of Ebola messages.
+ In a context of widespread quarantines and emergency measures that aimed to minimise large gatherings, mobile phones became a valuable tool to collect and share information with blocked off communities.

Lessons learned:
Timing: For many KIs, funding for social mobilisation and focus on “bottom-up” activities came too late (PI, 28/10/2015, PI, 18/10/2015, PI, 07/09/2015, 25/11/2015). Some of the most successful initiatives were the ones that ‘triggered’ communities to assess the outbreak themselves, its effects and likely impacts, creating a sense of urgency to develop community action plans and change their behaviours (CLEA, 11/2014),. Lessons learned from this intervention are equally applicable to a wide range of priority issues in West Africa, such as addressing the stigma faced by communities exposed to Ebola and the prevention of other communicable diseases.

Telecommunication channels and media: In Sierra Leone radio was by far the most widespread means for receiving information (Focus1000, 03/2015). In a context of widespread quarantines and emergency measures that aimed to minimise large gatherings, mobile phones were a valuable channel to collect and share information with blocked off communities. As a result, practitioners should be trained to report effectively and responsibly through these channels and incorporate feedback mechanisms that encourage audience participation.

Language: Language was one of the main difficulties faced by humanitarian workers responding to the Ebola crisis (HPN, 06/2015). Information and messages about Ebola were first primarily available in English or French, leading to a gap in material which could be used as part of sensitization campaigns.

Messages: Early messages designed to change the behaviour were counterproductive, as they failed to take into account deep rooted cultural practices and beliefs and context-specific difficulties (ICG, 10/2015; CAFOD, 2015). . The most efficient messages were adaptable enough to be culturally and regionally appropriate, repetitious and available in relevant languages.

Community leaders: Trusted members of communities serve as great role models for behaviour change. Significant improvements in community perceptions of key messages came when religious scholars were consulted to incorporate faith elements into public health messages, and provide examples from religious texts to support them (CAFOD, 2015).

Gender: Preliminary data suggests that women died in greater numbers than men at the beginning and peak of the outbreak, in part due to their role as caregivers (UN Women, 10/2014, Huffington Post, 15/10/2014). They were also less likely to access both telecommunication channels and traditional channels relaying information, and to be included in communication campaigns targeting community of faith leaders (UN Women, 12/2015). More effort should have been made to mainstream gender into health information campaigns (Harvard, 06/2015).

Credibility: High

Balde, A. (2016). "How elements of culture have contributed to the construction of health meanings in regards to the 2014 Ebola outbreak." Department of Communications Studies. MA Communications Studies, from https://scholarworks.iupui.edu/bitstream/handle/1805/10897/Balde%20Thesis%20Submitted.pdf?sequence=1&isAllowed=y.

The purpose of this paper is to examine the extent to which elements of culture (values, beliefs, and behaviors) have contributed to the construction of health meaning in regards to 2014 Ebola outbreak in Guinea. I conducted 14 interviews with people who lived in Guinea during the 2014 Ebola outbreak about their own experiences of the crisis and how health related messages were received by the general population. All the

participants in this study were between 25 and 56 with an average age of 41. All participants agreed that culture played a crucial role in how people perceived the disease. It has also impacted the way people responded the prevention plans. When the ones did not believe in the existence of the disease, others did believe but because of certain customs, they were unable to follow public health safety recommendation.

Credibility: High

Bristol, N. and C. Millard (2016). "Bolstering public health capacities through global polio eradication: planning transition of polio program assets in Ethiopia." Retrieved 12 Dec 2016, 2016, from https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/publication/160215_Bristol_BolsteringPubHealthEthiopia_Web.pdf.

Mentions that former polio funding should support social mobilization for health education. Also mentions advocacy and using community volunteers for health education. Relationships with local community structures listed as one of the most valuable assets of the program. Another major program asset listed as cross-border meetings and synchronization, though more specific details of these are not provided.
Credibility: Moderate

Davis, T. and A. e. Srinivasan (2016). "Ebola Barrier Analysis Compendium: Summary of Barrier Analysis Studies on Ebola-related Behaviors ". Retrieved 12 Jan 2017, 2017 from http://www.fsnnetwork.org/sites/default/files/BA_Ebola_Compendium.pdf.

The outbreak of Ebola Virus Disease (EVD) in West Africa devastated the countries of Guinea, Liberia, and Sierra Leone. The rapid spread of the virus revealed the extent to which existing systems were weak and non-functional. Though much attention was given to the faults in the health care systems in these countries, of equal importance were the flaws in the system for communication. Trust between communities and Government was sub-optimal, and those in a position to communicate to the affected communities (e.g., Government, Non-Government Organizations [NGOs]) did not apply the best principles of behavior change communication.

The main lessons learned based on the studies presented in this compendium include the following:

a. The key determinants that are significant in almost all the studies noted here are perceived self-efficacy, perceived social norms, perceived positive and negative consequences of the behavior, cues for action and access.

b. For some of the behaviors related to Ebola, community leaders played an important role in bringing about a positive difference. Being a key stakeholder and a role model in their community, they can play a key role in the rapid uptake of preventive behaviors. However, not all leaders are trusted. There is a need to educate community leaders on communicable disease prevention and ensure that these leaders can be easily contacted by locals during a crisis. People are also highly influenced by the opinions and recommendations of their peers and family members, so moving life-saving information out to a higher proportion of community members (not just leaders) through trusted individuals is important in halting an epidemic. Volunteer peer educators (e.g., Care Group Volunteers) can be useful for this purpose.

c. One of the key determinants that can aid in uptake of preventive behaviors is the community's access to basic amenities. Some of these include access to a means to communicate (e.g., a cell phone); access to television/radio which are the sources through which preventive messages are delivered; easy access to key stakeholders such as community leaders; and water, soap/ash and hand washing facilities in important places like homes and health care centers. Further, there is a need for putting in means (e.g., posters, stickers) for reminding people of the behaviors that help halt epidemics,

especially when new behaviors are being promoted (e.g., calling a number to report an illness or death).

d. Perceived social norms and the degree of social stigma associated with some of the behaviors are also important. Amongst the Non-Doers of the behaviors, many perceived that people who were important to them (e.g., family and friends) disapproved of adoption of certain preventive behaviors, such as reporting of Ebola symptoms and hand washing, despite what was being recommended by leaders. Preventive measures such as calling the burial team, care seeking for fever and not touching the dead sometimes clashed with some people's (but not everyone's) cultural beliefs. In some cases, rumours started that a person may be profiting from doing a behavior. Some believed that just going to the hospital for testing would result in them being labeled and stigmatized by the community as infected even if they were not. Changing perceived social norms and reducing stigma deserve more attention than they usually receive in many communicable disease outbreaks.

e. Even after successfully treatment of Ebola cases, some of the survivors were also subjected to social stigmatization, similar to what happened during the HIV epidemic. Certifying people as "Ebola free" was found to be important in helping people to return to work or school, including those who were never seen in a health facility. This is a very important area for further research. Community messages regarding survivors should also be included during delivery of messages on Ebola prevention so that the survivor can retain a positive relationship with community members.

f. The reports above are specific to certain regions of West Africa and findings cannot be generalized throughout the world. Further Barrier Analysis studies need to be conducted on these and other behaviors in order to see if the same or different behavioral determinants are associated with the behaviors in other parts of the world.

g. Even though the findings from these studies cannot be generalized, other communicable diseases that could reach the levels of an epidemic (e.g., Marburg Virus Disease) will require similar behavior changes within these countries, and similar social and cultural factors should be targeted to avoid transmission of other diseases. This compendium may provide useful ideas and lessons learned when designing other prevention approaches.

The key determinants that would need to be addressed in future outbreaks in Liberia and Sierra Leone include perceived self-efficacy, perceived social norms, access, cues for action, and perceived positive and negative consequences of the behavior (including social stigmatization). We can see from the results of these studies that several factors can affect uptake of a behavior including presence of trusted community leaders, access to communication, and cultural, social and political factors.

Credibility: High

De Roeck, D. (2016). "Guidance Note on the Use of Oral Cholera Vaccines." from http://www.plateformecholera.info/attachments/article/286/Guidance%20Note%20on%20the%20Use%20of%20Oral%20Cholera%20Vaccines%20-%20FULL%2042616.pdf.

- Discussing the upcoming campaign with community leaders and members and conducting a rapid communications assessment is essential to develop effective communication messages and social mobilization strategies; identify the best channels of communication to use; and identify barriers and other unanticipated problems that can potentially derail a campaign as well as provide possible solutions.
- Since OCV campaigns usually target a specific, limited population (e.g., one area of a city or a few sub-districts of a province), be careful to select channels of communication that could draw large numbers of non-targeted people to the vaccination campaign. Thus,

broadcast media, such as radio or mass SMS messages, may not always be an optimal means of informing the public about the OCV campaign.

Credibility: High

DuBois, M., et al. (2015). "The Ebola response in West Africa: Exposing the politics and culture of international aid." Retrieved 1 Dec 2016, 2016, from https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9903.pdf.

Issues around communication, community engagement and trust also marred the early phases of the response. Top-down communication sidelined the communities whose engagement was essential in enabling people to protect themselves and others from infection; reduce fear and mistrust of and resistance to health authorities and stigmatisation; prevent transmission of the disease; develop safe, supportive practices of care for the ill or those at risk of infection; and develop safe and supportive burial practices. The early stages of the surge did not prioritise such engagement or capitalize on affected communities as a resource, but treated them more as a problem – a security risk, hidebound by culture, unscientific – to be overcome.

People, in particular rural populations, were stereotyped in the media as irrational, fearful, violent and primitive: as too ignorant to change. Such stereotypes feed paternalism and the view that Africans lack agency, are unable to help themselves and hence require foreign assistance. This dovetails with a self-perception of humanitarian action as 'saving' helpless victims – reinforced in turn by a media focus on the international response to Ebola, despite the evident fact that the vast majority of the effort on the ground was local. The result is a predisposition in the aid system towards control and an inflated sense of its own importance, rather than responses and strategies that engage with and rely on communities.

Credibility: High

Francia, M. (2015). "Social mobilizers empower 'hotspot' communities to fight Ebola in Sierra Leone." Retrieved 18 Jan 2017, 2017, from https://www.unicef.org/infobycountry/sierraleone_78953.html.

NOTE: News article, but refers to changes in KAP study results performed before and after Hot Spot Busters interventions. Gives details about interventions and keys to their success: mobilizers are members of local communities, messages are tailored for each community, working with local leadership & groups, using SMS for real-time monitoring.

Credibility: Moderate

Gautier, L. (2016). Analysis of the community-led infection prevention strategy adopted in the context of preparing the response to the Ebola virus disease, International Rescue Committee (IRC).

Thus, 1,930 members of existing "monitoring committees" (composed of community health workers, community leaders, representatives of youth, women, religions, and traditional healers) were trained from December 2014 to August 2015 on general concepts about Ebola and prevention against EVD in order to play a decisive role in changing population's behavior. This study aims to analyze the community-led strategy, to document lessons learned from the experience, and to capitalize on the achievements.

Results: Community members appreciated sensitization efforts led by their community health workers and community leaders. Communities hardly opposed any resistance to sensitization efforts. Monitoring committee members however faced material difficulties in their daily sensitization activities. People interviewed demonstrated accurate understanding of information about prevention practices. Hand-washing with soap and replacing bush meat with other types of meat were reported to be widely and

rapidly adopted. However, shaking hands when greeting someone (including strangers), and respecting dead body management safety measures were more difficult to implement by the communities mainly for sociocultural reasons.

Discussion: It is possible to capitalize on the results, particularly on hand-washing that has been substantially scaled-up thanks to this community-led initiative. In the long term, and if sustained with material resources, water and community efforts, this achievement could in turn contribute to the prevention of diseases related to insufficient hygiene. Furthermore, this program strengthened the sense of legitimacy for community health workers and community and religious leaders.

Conclusion: This research demonstrates that sensitization efforts led by well-integrated and respected community leaders can lead to substantial behavior changes that are critical to people's health, even in a context of poverty, political trouble, and misinformation. Yet it remains unclear whether such healthy behavior changes will remain in the long term. Further investigations could look into how to better sustain handwashing as a general hygienic measure.

Credibility: High

Gautier, L., et al. (ND). Preparing for the Ebola virus disease: analysis of the community-led prevention strategy in four Western districts of Cote d'Ivoire.

Background:
Starting in December 2013, the Ebola virus disease (EVD) epidemic spread within West Africa through five countries (Sierra Leone, Liberia, Guinea, Nigeria, and Mali), grew rapidly killing
at least 11,300 people. The International Rescue Committee (IRC) organized a large-scale Ebola response in order to prepare communities for a potential outbreak, including in Cote d'Ivoire. Communities play a pivotal role in the development and execution of Ebola response plans. The IRC implemented a community-led strategy aimed at promoting behavior change in order to prevent potential Ebola outbreaks in Tonkpi and Kabadougou-Bafing-Folon regions of Cote
d'Ivoire, given their proximity to Liberia, Guinea, and Mali. This study aims to analyze the community-led strategy, to document lessons learned from the experience, and to capitalize on the achievements.

Methods: A case-study in Biankouma and Danané districts (Tonkpi), and Odienné and Touba districts (Kabadougou-Bafing-Folon) was carried out. The research team collected qualitative data in 12 villages (i.e., three villages per district) with 61 healthcare workers, members of the monitoring committee, and ordinary community members. Data was de-identified, coded and analyzed using a thematic approach.

Results:
Community members reported appreciating sensitization efforts led by their community health workers and community leaders. Activities were reported by some monitoring committee members at times to be limited by a lack of supplies. Nonetheless, people interviewed demonstrated accurate understanding of information about prevention practices. Hand-washing
with soap and replacing bush meat with other types of meat were reported to be widely and rapidly adopted. However, avoiding shaking hands when greeting someone, and ensuring safe and dignified dead body management were more difficult to implement by the communities.

Discussion: In the long term, especially if sustained with material resources, water and community efforts, scale-up of hand-washing could contribute to the prevention of various communicable diseases. Furthermore, this program strengthened the sense of legitimacy

for community health workers and community and religious leaders.

Conclusion: This research demonstrates that sensitization efforts led by well-integrated and respected community leaders can generate substantial behavior changes. Yet it remains unclear whether such healthy behavior changes will persist in the long term. Further investigations could look into how to better sustain handwashing as a general hygienic measure.

Credibility: High

Global Communities Partners for Good. "Stopping Ebola in its Tracks: A Community-Led Response." from http://www.globalcommunities.org/publications/stopping-ebola-in-its-tracks-2015.pdf.

Global Communities' strategy in fighting Ebola was not to drop in from the outside and fix the situation. Working through local actors and constantly revising our strategy meant that the response was locally driven and locally implemented in partnership with Liberian stakeholders and health teams.

The central tenets of our response were:
• scaling up from existing relationships and networks to develop a country-wide response;
• adapting strategies to meet the changing trajectory of the disease;
• building on existing local capacity where possible—and simultaneously further building capacity;
• listening to needs expressed by those closest to the disease and adapting appropriately.

From this experience, Global Communities has drawn a number of lessons learned, as follows:

Stopping Epidemics Requires Effective Community Engagement
Responding to an epidemic requires a different set of approaches than for other kinds of humanitarian emergencies. Infectious diseases follow the patterns of daily social movements and interactions; stopping the spread of disease requires the development of strategies to engage communities in rapid behavior change. Attempts to force behavior change resulted in widespread resistance with the opposite outcome from what was intended. Global Communities believes the results of our Ebola response demonstrate the possibility of deploying scalable and highly effective social engagement strategies to enable community-led action for improved health behaviors and community resilience.

Preventative Health through Improved Sanitation
Safe burials and dead body management were extremely effective in reducing the rate of infection in Liberia. But the most effective method of overall prevention, in Global Communities' experience, was our prior work in CLTS in Bong, Nimba and Lofa counties. The 284 communities that were certified ODF by Global Communities prior to the crisis were also Ebola free, despite being surrounded by Ebola hotspots. Additionally, communities that began the CLTS process but never finished it were 17 times less likely to experience Ebola infection. This research is detailed in a separate report by Global Communities. Disease spreads at the community level and must therefore be combated at the community level. Clinical infrastructure is extremely expensive. Community-led sanitation initiatives are not. Any curative health system strengthening work must be complemented by preventative approaches, such as CLTS, which guard against not only Ebola but also cholera, dysentery, diarrheal diseases and many other illnesses that are endemic throughout much of the world.

Enhance Local Systems
Emergency responders should work through indigenous systems—whether community, traditional and religious or through county and national government. By working through these structures responders can gain local knowledge and simultaneously build the capacity of the people who will be in place to deal with future crises. Even at the earliest stage of an emergency, a localized response can begin putting in place the future knowledge, skills and structures that will build resilience and make future disasters—Ebola or others—manageable. There need not be a division between "humanitarian assistance" and "development assistance" if the response is driven through local structures. And by working through people already known to the communities, trust can be quickly established and barriers to trust are overcome with cultural sensitivity.

Environmental Health Technicians
Most countries in Africa and many in the world have a county-level EHT system in place to a greater or lesser degree. These EHTs were at the center of our approach. The EHTs were able to undertake large-scale community education, they were able to adapt to become burial teams, and they were able to become border surveillance and contact tracing experts. These local experts should be understood in the future as a vital resource in fighting disease at the community level and putting prevention into practice. At the same time, EHT capacity varied widely. Building their capacity should be a priority for health
interventions.

Flexibility
Responders must experiment and continually assess what more can be done. They must be open to suggestions from all quarters, especially from the community and other sources of local knowledge. Many organizations have a specific area of expertise, but they should not seek to bend the crisis to fit their expertise; they should bend their expertise to fit the crisis.

Brute Force Implementation
In an age when every latest technological innovation is heralded as a silver bullet to one problem or another, it is worth noting that the Ebola response was an example where the most effective strategies could be considered "brute-force" strategies: it took 500 people engaged in burial and disinfection teams, 15,000 community leaders engaged in education/action planning in five months; hundreds of vehicles used in getting our responders to all ends of Liberia; and a donor willing to support this work to the scale it needed. No form of engagement was more effective than face-to-face discussion, and there are no technological short-cuts for safe burial and body management. This was not a crisis solved by new technologies and innovations, but by an enormous amount of human and other resources.

Credibility: Moderate

Health Communication Capacity Collaborative (2016). "HC3 Landscaping Summary Report on Zika Coordination and Communication in Four Countries: Honduras, El Salvador, Dominican Republic and Guatemala, March – April 2016." from http://www.zikacommunicationnetwork.org/sites/default/files/resource_files/Zika-Summary-Report-FINAL-03Aug2016.pdf.

NOTE: Document reports on current state of communication around Zika, notes what messages need to be focused on, mentions social media and coordination between different organizations. Also notes the need to train outreach workers in communication skills and messages. Mentions the need to keep the press informed and help shape their communications around Zika as well.

Credibility: High

Hiemstra, N. (2015). "Ebola response in Liberia: community health volunteers." Retrieved 1 Dec 2016, 2016, from http://oxfamilibrary.openrepository.com/oxfam/bitstream/10546/560740/1/cs-ebola-response-liberia-010515-en.pdf.

When Ebola hit Liberia in 2014, an atmosphere of fear and confusion contributed to the spread of the virus by making people unwilling to come forward for testing and treatment. Oxfam trained and equipped community health volunteers to go door-to-door, giving information and advice, encouraging anyone showing symptoms to go for tests, and keeping their family members informed about the progress of their treatment. The approach won the trust of communities and helped to slow the spread of the disease.

Credibility: Low
Note: This document comes from one of the agencies on the ground and describes its experiences. In this respect I thought it valuable even if it is low credibility.

Hird, T. and S. Linton, eds. (2016). "LESSONS FROM EBOLA AFFECTED COMMUNITIES: Being prepared for future health crises." from http://www.royalafricansociety.org/sites/default/files/reports/AAPPG_report_3.10_sngls_web.pdf.

A diverse range of actors were involved in the response in West Africa. They often had different priorities and strategies and not every strategy was successful. In the early stages mistrust of and resistance to responders was indicative of a lack of community engagement. This report analyses the engagement by different groups in the community including women, young people and community leaders and highlights the crucial role they played in creating successful strategies to control Ebola. To ensure the voices of affected communities were represented in the report, 23 key informants were interviewed. In Sierra Leone these were conducted by Restless Development, and in Liberia by Public Health & Development Initiative (PHDI).

This report finds that response efforts were most effective when communities demanded assistance at the local level. It therefore advocates that although a top down approach (nationally and internationally) may always be necessary in a health crisis such as an Ebola outbreak, it is only effective when the affected communities trust that response. The report acknowledges that the need to react rapidly in a health crisis makes it almost impossible to consult communities immediately. However the key lesson in ensuring preparedness for future health crises is that health systems should be developed horizontally, local ownership should be prioritised and investment made at community level. Such approaches foster trust and create demand for health services. Communities should be consulted about their needs and local facilities and systems developed to provide permanent services which local people trust and access and which can respond effectively during a crisis.

The chief finding of the report is that efforts to curb the outbreak of Ebola in West Africa were most effective when local leaders of affected communities led the demand for assistance from their governments and the international actors, and played an essential leadership role in the management of that assistance.

The chief recommendation of this report is that the UK government and nongovernmental organisations should give higher priority to community ownership of health. This would strengthen local health systems and enable them to respond more effectively to a crisis. The conclusions of this report will help guide a UK response to future epidemics and, in the long term, help reconstruct and strengthen health systems in poor countries.

Credibility: High

Independent Monitoring Board of the Global Polio Eradication Initiative (2015). "Now is the time

for peak performance." Retrieved 9 Dec 2016, 2016, from http://polioeradication.org/wp-content/uploads/2016/07/01.pdf.

With Polio rates the lowest they have ever been in history, the campaign for eradication is uniquely poised to eliminate this disease. Document presents country-by-country key actions that need to be taken. Many of them focus on communication and community engagement or social mobilization.

NOTE: Some discussion of how messages need to be framed. Note that lack of appropriate communication has given rise to harmful and inaccurate rumours about the vaccine in Ukraine. Poor interagency relations (UN, other orgs & govt.) and prevent project success in Afghanistan. In Pakistan, using locals - especially women - to promote health in general, not just in relation to polio - has proven successful.

Credibility: High

Institute of Development Studies (IDS) (ND). "Africa APPG inquiry: Community led health systems & the Ebola outbreak." Retrieved 9 Jan 2017, 2017, from http://www.ebola-anthropology.net/wp-content/uploads/2015/07/Africa-APPG-inquiry-IDS-submission.pdf.

Effective responses need to be organised around meaningful collaboration from the beginning, in ways that involve local people and local knowledge in designing response strategies in partnership with biomedical, social science and other expertise. Considering all of this, radically greater investment is needed to learn from and support successful local response capacity, and to demonstrate how substantive collaborations can be realised at scale. In order to ensure that interventions are appropriate, inclusive, and relevant to context, local experience, knowledge and perspectives on containing infectious diseases should be at the centre of public health and biomedical response strategies.

'Culturalist' assertions and dismissive discourses misdiagnose the problem and limit the scope
for meaningful community engagement. An effective response needs to be able to recognise
and support local organisation, and to address people's fears and the sources of their distrust.

NOTE: Although no date appears on the document itself, Anthropology platform website listed 2015 as the date for this document.

Credibility: Moderate

International Federation of Red Cross and Red Crescent Societies (IFRC) (2015). "Beyond Ebola: From dignified response to dignified recovery." from http://www.ifrc.org/Global/Documents/Secretariat/201601/Beyond%20Ebola%20report-EN_LR.pdf.

NOTE: Document emphasizes the importance of 2-way communication for community engagement, and that community engagement played the central role in halting Ebola.

Credibility: Moderate

International Rescue Committee (IRC) (2016). Evaluation of IRC support of the Restoration of Health Services at Redemption Hospital.

NOTE: Document presents evidence surrounding the rehabilitation and reopening of Redemption Hospital in Monrovia, Liberia after the Ebola epidemic. Document does NOT discuss risk communication. It does offer examples of and insight into community engagement and communication necessary to rebuilding trust. Improving staff communication skills was key, as was facilitating community access (tours) to the

hospital and fostering communication between the community and the health care system. Also important was mental health care for workers and improving their ability to provide care by providing supplies, etc.

Credibility: Moderate

International Rescue Committee (IRC) (2016). Montserrado Ebola Prevention and Response Consortium Evaluation, International Rescue Committee (IRC).

No single factor ended the Ebola epidemic in Liberia, but there is a strong consensus that individuals and communities were critical in recognizing the problem, changing their behaviors and organizing themselves to prevent new infections. The critical importance of actions taken at the grass roots level is evidenced in the decline in the epidemiological curve well before the full response was established, before the Consortium was fully functional, or ETU and lab capacity was achieved. However, community level actions would have been inadequate without these contributions. The intense surveillance needed to end the epidemic was made possible with support from international partners, of which the Consortium was an influential and effective member.

NOTE: Discusses interagency coordination, emphasizes the importance of communication and participatory decision making. Notes that placing a case investigator on the burial teams improved both contact tracing and engagement with the families. Sharing information between consortium members was vital to effective work and helped build trust, as did getting technical input from WHO.

Notes that at the beginning, community engagement was not seen as important. Recognition at the end that community engagement was central to a successful response, community engagement, collaboration & allowing the communities to drive the process. Note that the turn in the epidemic came before full international engagement. It started when local populations did the best they could to isolate & care for the sick. Also acknowledgement that getting to zero required technical expertise beyond the community - namely the international response. Comments about transparency (financial as well as in relation to interventions) necessary to building trust. Developing efficient and effective response systems also critical to building trust.

Note that in the urban setting, lack of traditional leadership structures made community entry and engagement more challenging. Speed of response also critical to trust building. Drawing contact tracers from the local community also helped. Key to changing attitudes was focusing on the strengths of the Liberian people.

Credibility: Moderate

Jones, T., et al. (2016). "Addressing barriers to maternal health services post-Ebola in Monrovia, Liberia using participatory action research." from http://www.tarsc.org/publications/documents/Liberia%20PAR%20Report%20January%202016.pdf.

NOTE: Document emphasizes the importance to maternal health services of community engagement and communication between health workers and the community, especially pregnant women. The community needs to perceive ownership of the health systems and interventions.

Credibility: Moderate

Ki-moon, B. (2015). "Letter dated 10 February 2015 from the Secretary-General addressed to the President of the General Assembly." Retrieved 6 Dec 2016, 2016, from http://www.un.org/en/ga/search/view_doc.asp?symbol=A/69/759.

Across the three countries incidence rates have fallen and the total number of confirmed

cases per week has significantly declined since 1 January. Progress in stemming the epidemic is associated with several factors, including strengthened government and community ownership; improved coordination, especially at the subnational level; and progress on the integration of the four lines of action. The initiative shown by community leaders in identifying local solutions and messaging to tackle the outbreak has also played an instrumental role.

Nevertheless, targeted efforts will still be required to further reduce the number of cases in many districts and strengthen surveillance to ensure that new cases emanate from known contact lists. As at 25 January, 54 per cent of new confirmed and probable cases in Guinea, 100 per cent in Liberia and 21 per cent in Sierra Leone derived from registered contact lists. Integration of surveillance with contact tracing and social mobilization is therefore critical. In addition, while case management and laboratory capacities have been strengthened across the affected countries, adjustments continue to be needed in order to ensure sufficient geographic coverage and optimized utilization.

Note: includes further details of coordination meetings and repeatedly re-states the key role played by trust-building through social mobilization. Also provides funding/disbursement details, although not separate numbers for risk communication.

Credibility: Moderate

Korkoyah Jr, D. T. and F. Wreh (2015). "Ebola impact revealed: An assessment of the differing impact of the outbreak on women and men in Liberia." from https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/rr-ebola-impact-women-men-liberia-010715-en.pdf.

Service providers need to strengthen the knowledge and skills of women for effective Ebola prevention and control. Women, and especially elderly women, have continued to play the role of care-givers, so they need all relevant information and skills to provide better care, as well as to protect themselves against contracting the disease. In addition, targeting women for capacity-building will ensure that children are well informed about Ebola, since it is women who take the lead in sensitizing their children.

ii There is a need for improvement in levels of community engagement and social mobilization in order to foster maximum participation by communities, which remains critical to national preparedness and recovery efforts. In this light, it is imperative that the government and donors enhance outreach efforts to community leaders and local health workers, as ordinary people trust information provided by such people more than other sources. Stakeholders planning such initiatives need to ensure that the leadership role and agency of women are visible, and the full participation of women should be promoted at all levels of community engagement.

The government and its partners in social mobilization need to give more attention to mobilizing and training religious leaders, as most people have strong faith. Equipping religious leaders with the relevant knowledge, skills and attitudes could put them in a better position to become effective change agents in the recovery agenda. Targeting religious leaders is critical to reaching out to women; women and men are equally religious, irrespective of the faith they profess.

NOTE: Document's primary focus is how Ebola has impacted women more than it has men. It does specifically mention community engagement and social mobilization and the importance of women playing key roles in these activities as well as being key targets for these activities. Also mentions other gender issues.

Credibility: High

Liberia Ministry of Health (2015). "National Knowledge, Attitudes and Practices Study on Ebola Virus Disease.". from http://ebolacommunicationnetwork.org/wp-content/uploads/2015/04/KAP-Study-Liberia-March-2015.pdf.

The KAP study has shown that at the time of the interviews, general awareness of Ebola was universal
and knowledge of symptoms, transmission routes and prevention were reportedly very high. There was close to full support for core Ebola strategies (isolation of contacts, seeking early treatment at ETUs, contact tracing, and quarantine). Risk perception was low as 73% perceived that they were at no personal risk of getting infected in the next four months mainly because they said they practice all the desired preventive measures. Most participants said had adopted hand washing with soap, chlorine or some other disinfectant. The study has confirmed that radio is main source of information on Ebola and that government messages have highest credibility. As regards to survivors, the study shows that attitudes towards acceptance were largely positive albeit cautious.

There is need to address common misconceptions, especially about mosquitoes need to be addressed. EVD messages need more nuance to promote resumption of healthy interactions (immunization/schools/health care) while still discouraging most dangerous (some burial practices, hunting bats, other reservoirs). There is also need to address concerns about post-infection transmission that feed stigma against survivors. Interventions should also seek to strengthen health facility infection, prevention and control; and community systems for rapid remobilization if case of Ebola resurgence. Lastly, there is need for a follow up study that will focus on restoration themes (stigma, vaccines, health care utilization) in selected counties.

NOTE: Person-to-person communication (with family or health workers) were also listed as sources of risk communication information.

Credibility: High

Medecins Sans Frontieres (2015). "Pushed to the limit and beyond: A year into the largest ever Ebola outbreak." Retrieved 1 Dec 2016, 2016, from http://www.msf.org/sites/msf.org/files/msf1yearebolareport_en_230315.pdf.

Primarily a blow-by-blow report of the first year of the Ebola outbreak. Does list awareness raising as #3 of 6 activities crucial to stopping the epidemic. The narrative demonstrates how lack of communication, mistrust, lack of capacity, poor coordination, etc. contributed to the epidemic's spiralling out of control.

Credibility: Moderate

Medecins Sans Frontieres (2016). "An unprecedented year: Medecins Sans Frontieres' response to the largest ever Ebola outbreak, March 2014 to March 2015." Retrieved 1 Dec 2016, 2016, from http://www.msf.org/sites/msf.org/files/ebola_accountability_report_final_july_low_res.pdf.

MSF's report on the first year of the Ebola outbreak. Includes some discussion of awareness-raising - mass media campaigns, door-to-door, etc.

Credibility: Moderate

Medecins Sans Frontieres (2016). "MSF supported research on Ebola." Retrieved 1 Dec 2016, 2016, from http://www.msf.org/sites/msf.org/files/msf_ocb_ebola_research_en_web.pdf.

This booklet provides a summary of what we learnt in relation to Ebola, and contains a review of all operational research projects carried out by our Brussels operational center, as well as the MSF Operational Research Unit based in Luxembourg.

Understanding the community
MSF anthropologists had the important role of finding out what the affected communities

thought of the Ebola virus and government control measures such as quarantine. This research allowed MSF to identify areas of misunderstanding and rumour within the community. Health promotion messages were then targeted to address these knowledge gaps. In addition, anthropologists were crucial for identifying the beliefs and behaviours within communities that facilitated further spread of the Ebola virus.

State imposed cremation of Ebola cases in Liberia and quarantine of contacts in Sierra Leone caused significant fear and mistrust among affected populations which sometimes resulted in behavior that increased the spread of the virus.

In any future flare ups of Ebola, it will be necessary to incorporate community led solutions for controlling the outbreak.

Credibility: Moderate

Miller, L., et al. (2016). "The Ebola Lessons Reader: What's being said, what's missing and why it matters ". from https://www.rescue.org/sites/default/files/document/563/theebolalessonsreaderlowres.pdf.

We have selected reflections from key actors involved in the Ebola response. Our selection includes representatives from academia, think-tanks, NGOs, donors and the United Nations. We identified specific top-line recommendations assigned to actors and consolidated similar observations. Pages 4-9 include our review.

Secondly, and more seriously, these reports reflect a persistent weakness of the global conversation about health systems: the erasing of politics. This includes the politics of poor, post-conflict countries, but also the politics of the UN, NGOs and the international aid world. These failures set the stage for a small Ebola outbreak to evolve into a catastrophic epidemic. The failure to anticipate and adapt to political realities then hobbled the response effort.

NOTE: Discusses trust issues and community engagement, noting that without including politics (local to international) in the discussion, these topics hold little meaning. In order to be effective, interventions must take into account the political histories and realities on the ground.

Mention is also made of the importance of including local leadership - religious and otherwise - in order to build trust. Also touches on inter-agency coordination, roles & responsibilities and cross-jurisdiction issues, although not directly in relation to risk communication.

Credibility: High

Modarres, N. (2015). "Community Perspectives about Ebola in Bong, Lofa and Montserrado Counties of Liberia: Results of a Qualitative Study ". from http://ebolacommunicationnetwork.org/wp-content/uploads/2015/02/Liberia-Ebola-KAP-study_Research-Report_FINAL_10-Feb-2015.pdf.

NOTE: Recommendations include targeting groups with messages specifically tailored for them, keeping communities updated on Ebola status of the nation and their community, involving local community and religious leaders, work through existing infrastructure as they already have relationships with the local community, use local community members for task force, train local health workers in emergency response - including communication, involve survivors - their numbers and stories helped change public opinion about ETCs, involve communities and local leaders in follow-up activities - what did/didn't work for them. Local radio mentioned as credible source of health information, along with religious & community leaders, local health or task force workers and survivors.

Credibility: Moderate to high (some but limited interaction with literature)

NYC Health (2016). "Innovative practice: New York City Outreach Teams." Retrieved 7 Dec 2016, 2016, from https://www.fema.gov/media-library-data/1463503813546-3390eb443d46c610c371b3cefda5f580/NYC_CmmntyOtrchInnoPract_Clean_20160517.pdf.

Describes how NCY set up multi-lingual and multi-cultural outreach teams to provide risk communication to the city's people after the first case of Ebola in the US.

When the Centers for Disease Control and Prevention confirmed the first-ever case of Ebola Virus Disease (EVD) in the United States, New York City (NYC) quickly acted to educate the public about EVD and its associated risks. In support of this effort, the NYC Department of Health and Mental Hygiene (DOHMH) deployed community outreach teams to distribute informational materials and engage the public in discussions about EVD. Supported through $170,000 in Public Health Emergency Response funds, the teams' efforts alleviated public fears and provided New Yorkers with practical information about how to protect themselves against spreading or contracting EVD. The community outreach teams offer other communities a successful model for sharing emergency preparedness information with the public.

Credibility: Moderate

Oosterhoff, P. (2015). "Ebola Crisis Appeal Response Review." from https://issuu.com/decuk/docs/dec_ebola_crisis_appeal_response_re?reader3=1.

DEC member agencies' prevention work, such as safe burials and awareness raising, in response to the Ebola epidemic in Sierra Leone is "impressive" but must continue to adapt to the changing situation in West Africa, an independent review of the DEC response has found.

The Ebola Crisis Appeal Response Review conducted in March 2015 by the Institute of Development Studies for the DEC found that member agencies utilised their existing networks and relationships in Sierra Leone to scale up programmes after the Ebola crisis appeal launched in October 2014.

Aid agencies used their experience of community-based public health to launch large-scale awareness campaigns, combining their long-term knowledge with new interventions – such as graveyard management, contact tracing and providing food and supplies to quarantined households – to "adapt quickly" to the unprecedented emergency.

NOTE: Document discusses how DEC orgs' existing community connections were used and expanded upon for Ebola-related social mobilization. Importance of using existing community structures. Teachers also used for social mobilization. Need to make sure early-warning systems include local-level stakeholders & leaders.

Credibility: High

Oosterhoff, P., et al. (ND). "Community-Based Ebola Care Centres: A formative evaluation." Retrieved 9 Jan 2015, 2017, from http://www.ebola-anthropology.net/wp-content/uploads/2015/07/Community-Based-Ebola-Care-Centres_A-Formative-Evaluation1.pdf.

Implementing partners and policies emphasised the need for community ownership and engagement. Ebola-related security incidents also showed the dangers of failing to work with communities. But the evaluation found divergent opinions among partners on community engagement, local ownership and the role and function of the CCCs in the wider health system. These differences reflect different approaches to public health in emergency responses, and different understandings of what is possible in emergencies. Perspectives were also influenced by patterns of Ebola virus disease (EVD) transmission

and the timing and availability of EVD facilities and services such as ambulances and treatment units in each district.

The Ebola response used traditional hierarchical political structures to reach communities in consultation with DERCs that were specially set up in parallel to existing district-level state systems. Some of these district-level facilities were still functioning while others had collapsed. Policy makers, implementing partners and authorities expressed concerns about the coordination between these parallel governance systems and structures. Communities were apprehensive about the political decision-making processes on the allocation of land, water resources and jobs. The use of traditional authorities and emergency systems and rules to fight Ebola were accepted, but perceived abuse of power, especially favouritism with regard to employment, was strongly and widely resented. However, staff who worked at the CCCs were both appreciated and commended for their efforts whether they were locals or outsiders. People felt they should be paid well as it was risky work that could damage people's private and professional lives for a long time.

Much has been written about the fear and 'ignorance' of average citizens in Sierra Leone and in other Ebola-affected countries. This evaluation found that many people of different ages in affected communities have detailed knowledge of case management and transport procedures and accept that some special measures were needed. What is important in relation to people's compliance with Ebola-specific rules is that they feel that the facilities are safe and that they and their loved ones, living or dead, are treated fairly and with respect.

Procedures around medical burials have been changed to make them more humane.

Credibility: High

Oxfam International (2015). "Ebola is still here: Voices from Liberia and Sierra Leone on response and recovery." Retrieved 5 Dec 2016, 2016, from http://oxfamilibrary.openrepository.com/oxfam/bitstream/10546/345644/1/ib-ebola-voices-liberia-sierra-leone-010315-en.pdf.

In Sierra Leone and Liberia, thousands of local people have taken part in campaigns to spread the message about how Ebola can be controlled, and millions have taken vital practical steps to prevent infection. When the last case of Ebola is eliminated, it will not only be because of medical treatment and action by governments and the international community, but because communities have been at the heart of the response.

Oxfam has listened to women and men in Liberia and Sierra Leone to hear their priorities for the immediate response, the recovery and beyond. Underpinning all of those priorities, listed on the right, was the need to continue listening to communities as the struggle against Ebola continues and recovery plans are formed and implemented.

This document presents results of community interviews and focus groups. Repeated reference is made to the importance of community engagement in halting the epidemic.

Credibility: Moderate

Oxfam International (2015). "Prioritising Community Engagement to Strengthen Health Systems in Ebola Recovery." Retrieved 30 Nov 2016, 2016, from https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/ib-prioritising-community-engagement-health-systems-ebola-recovery-090715-en.pdf.

This short paper outlines priorities for successful and sustainable community-based health systems:

1. Community engagement is crucial for getting to zero on Ebola. The governments of Sierra Leone, Liberia and Guinea must continue to prioritise and resource this. We must ensure that lessons are learned and embedded for future Ebola outbreaks.

2. Community health systems need to be built from the grassroots up, enabling communities to identify and manage their own health needs. This can be done by mobilising and equipping a broad range of influential groups who can engage communities, including religious leaders, women's groups, youth leaders, traditional healers, traditional leaders and community health workers (CHWs). Governments need to provide structures at the district level to enable this.

3. Extensive, resourced and integrated CHW programmes are important. The funding requests put forward by governments to build and formalise the work of CHWs should be considered affordable, cost-effective and a priority area for support by donors.

4. Accountability to communities and capacity at district level need to be significantly strengthened to empower communities and increase the likelihood that the large amount of funds pledged at the conference are spent effectively.

A turning point in tackling Ebola in Sierra Leone came with the development and use of community-led approaches such as Community Led Ebola Action (CLEA) and Dialogue, Reflection, Action-planning, Facilitation, Tracking change (DRAFT).4

These methodologies, developed by the Social Mobilisation Action Consortium (SMAC) and used by a range of agencies, are premised on participatory techniques to engage communities. The idea is to go beyond one-way conversations to triggering attitudinal change and guide action. The
approaches engage influential groups and figures such as religious leaders (local Imams and pastors), local leaders (mammy queens and chiefs), women's groups, youth groups, traditional birth attendants, teachers and traditional healers. In so doing, the ownership and sense of responsibility to prevent and respond to Ebola is shifted onto communities, households and individuals, rather than being retained solely by the official 'response workers'.

This led to huge uptake of positive practices during the Ebola outbreak and has the potential
to be used in building health systems after Ebola. The CLEA approach, for example, has supported over 10,000 communities in Sierra Leone to develop and implement action plans
focussing on preventative behaviours such as screening visitors, and reactive steps such as
alerting health authorities when community members display Ebola symptoms or have died.5
In essence, community-led approaches continue to create demand in a service that was considered, at the beginning of the outbreak, to be foreign, unwanted and threatening. There
are important lessons here for how communities can be engaged with health systems relating to other diseases, as well as the Ebola recovery.

NOTE: Social mobilizers need to be from the local community and speak the local language. They need to address people's fears. Consistent messages from mobilizers, religious leaders, media, radio & social media. Move planning down to the most local level. Use local structures and allow these structures and how they work to differ from one community to the next. Feedback and accountability to the community. Provide regular support (transport, pay, expenses) to CHWs and mobilization volunteers.

Credibility: Moderate

Peremans, M. (2016). "OCB Ebola Review Part 4: Advocacy & Communication." Retrieved 12 Jan 2017, 2017, from http://cdn.evaluation.msf.org/sites/evaluation/files/attachments/ocb_evaluation_ebola_advocacy_final_0.pdf.

Advocacy needs in (large scale) emergencies can only be appropriately covered if sufficient advocacy and communications resources based on longer term assignments are available early on, both at HQ and field levels. In the field capacity it is particularly key to have capacity for analysis and documentation that will feed the Task Force.

Where community fears of a disease are high, and acceptance of an intervention is at stake, there must be dedicated (local) staff for local communications from the very beginning of a response. A proper analysis of the cultural understanding, needs and dynamics must take place and strategies be developed accordingly and in good interaction with health promotion.

The development of effective and appropriate advocacy messages requires a global strategy with targeted messages for each context and for specific audiences that can ran in parallel to each other, e.g. individual states, local population.

Engaging with the media in a different way when an emergency of such gravity occurs is key, and will increase effectiveness.

Best practice examples in Liberia and Guinea demonstrate the immediate and striking impact of good local communication, and helped staff to avoid stigma. These examples also show the importance of using local mass communication tools to support health promotion.

The notable issue in this Ebola response was the difficulty of putting messages across in a way that were understood as intended, internally and externally, as well as nationally and internationally. There was a clear need to target messages better according to different situations and audiences.

Credibility: CASP - High; AACODS: Moderate - due to inability to review information sources

Quinn, M., ed, (2016). "Governance and Health in Post-Conflict Countries: The Ebola Outbreak in Liberia and Sierra Leone." Retrieved 1 Dec 2016, 2016, from https://www.ipinst.org/wp-content/uploads/2016/06/1606_Governance-and-Health.pdf.

The authors identify a number of lessons emerging from the response to the crisis in both countries:

• Local engagement is critical: In both countries, the initial response suffered from a lack of communication and coordination at the local level. The involvement of local actors who understood the local context and were trusted by their communities was crucial to eventually containing the outbreak.

• Top-down approaches are insufficient, and inclusivity is necessary: Both countries initially took a top-down approach in responding to the outbreak, partly because they had not effectively devolved management of the healthcare sector. Over time, the response came to involve more state and non-state actors, including civil society groups and traditional leaders, which facilitated prevention, control, and containment.

Building on these lessons, the authors offer a number of recommendations, including to:

• Implement existing national health policies and plans;
• Build national capacities to detect and respond quickly to health emergencies;
• Improve governance and leadership at the national and local levels;
• Strengthen community engagement in planning and managing health services;
• Rebuild trust in state institutions, including through dialogue with non-state actors;
• Ensure adequate budgetary allocations to the health sector;
• Improve oversight of health service delivery at the national and local levels;
• Build personnel capacity, particularly in rural areas; and
• Coordinate national efforts with regional and international efforts.

Credibility: Moderate

Richards, P. (2015). "How Ebola infection spreads and terminates in rural Sierra Leone." Retrieved 10 Jan 2017, 2017, from http://www.ebola-anthropology.net/case_studies/how-ebola-infection-spreads-and-terminates-in-rural-sierra-leone/.

Villagers are readily able to pick up patterns of Ebola infection from social data, and thus quickly learn the risks associated with nursing and burial. Illustrating the claim of Durkheim and Mauss that social taxonomy (in face-to-face communities) is the taxonomy of things, the need for "barrier" nursing, "safe burial" and quarantine quickly becomes apparent. Villagers regret the necessity for these measures, and would prefer to be trained to implement them themselves, but they do not reject them outright. Proof is to be found in the evidence that local efforts are made to meet these needs, even in the absence of an outside response. When outside rules are imposed, villagers strengthen them (for example, by making quarantine and controls over the movements of "strangers [hoteisia] even stronger than those mandated by the government). There is an important caveat, however. Face-to-face social knowledge necessary to halt Ebola is not found in all communities. In urban areas the mutual accountability found in villages is absent or less intense. Here, everyone is a "stranger". In some mining villages the flow of migrants is seasonal, or responsive to the ebb and flow of diamond "finds". Village authorities cannot keep account of all movements, and quarantine is readily evaded. It is in these more fluid social environments that Ebola is more likely to persist.

NOTE: Document describes knowledge of the social patterns of Ebola transmission among villagers in rural eastern Sierra Leone. Demonstrates that local knowledge can be engaged and built upon.

Credibility: Low

Richards, P., et al. (2015). "Village Responses to Ebola Virus Disease and its Prevention." from http://www.ebola-anthropology.net/case_studies/village-responses-to-ebola-virus-disease-and-its-prevention/.

The present document is the eighth and final report in a series presenting descriptive results of a survey of responses to Ebola and Ebola control in 26 villages in all three provinces of rural Sierra Leone, fieldwork for which was undertaken in December 2014. The report covers three villages in Gbo chiefdom, in Bo District. Some emphasis is placed on how inconsistencies of Ebola response are perceived at local level, and undermine trust. Ebola responders should not only improve the quality of their messages, but also concentrate on explaining aspects of the response that villagers find most puzzling, if trust is to be restored.

Our evidence suggests that most rural Sierra Leoneans have a good grasp of EVD infection pathways and react accordingly. Evidence of a downturn of Ebola infection in southern and eastern Sierra Leone predates much of the major international response towards the end of 2014. This is not to say that this effort was not needed, but to argue that local opinion was already pre-conditioned to the kinds of control measures needed to break the Ebola transmission cycle. In other words, villagers had learnt, even in advance,

to "think like epidemiologists". But local trust has been eroded by mixed messages and a failure on the part of responders fully to admit earlier mistakes and inconsistencies, and to explain, in terms meaningful to local populations, subsequent changes in policy on disease control. Here it is argued that trust could be restored if epidemiologists, and the Ebola response community more generally, learnt to "think like villagers". The data presented in this report, and in the seven that precede it, are intended to help that empathetic learning task.

Credibility: Moderate

Schere, M., et al. (2016). "Public deliberation: What is it and why do it?". Retrieved 7 Dec 2016, 2016, from http://nyam.org/media/filer_public/2d/0a/2d0ac559-75cc-4e3d-8858-c7101697cc9b/cearpublicdeliberationreportfinal6-24.pdf.

The New York Academy of Medicine (the Academy) has a rich history of partnering with community-based organizations and engaging community members to inform the design and development of programs and policies that promote good health.

We have used multiple methods in this work, including community member surveys, in-depth interviews, focus groups, and PhotoVoice—each of which has proved informative for gathering information on particular questions. This report describes “public deliberation,” a method we utilized recently in collaboration with Maimonides Medical Center, a South Brooklyn hospital serving an extremely diverse community. Public deliberation is unusual in its intensity, significant educational component, and focus on providing guidance around a specific—often value-laden—question.

We describe it here, as it represents an important option for community engagement in public health.

This methodology differs from other forms of community engagement in that it allows community members to delve deeply into the decision at hand—providing ample time and information, as well as a framework in which to learn from others, clarify their own values, and arrive at a more meaningful, community-centered response to the deliberative question. As part of the deliberative process, participating community members receive relevant background information including balanced and/or neutral presentations from individuals with expertise relevant to the decision-making context. Participants spend time interacting with the facilitators, the presenters, and—most importantly—with one another as they consider case studies and/or exercises developed to facilitate discussion that will elucidate preferences, priorities and recommendations for the sponsoring institution or policy maker.

An essential component of public deliberation is an inclusive recruitment process to select demographically and geographically representative individuals—or those considered representative based on the issue in question.

NOTE: Does NOT address emergency risk communication, but does look in depth at this form of community engagement.

Credibility: Moderate

Schoch-Spana, M., et al. (2016). "How to Steward Medical Countermeasures and Public Trust in an Emergency – A Communication Casebook for FDA and Its Public Health Partners ". from http://www.upmchealthsecurity.org/our-work/pubs_archive/pubs-pdfs/2016/MCMCommCasebookJune102016.pdf.

3. Build pre-crisis partnerships and alliances with other stakeholder entities to coordinate communication resources and activities, enlist their help in better understanding and reaching target audiences, and establish trusted links that can be activated during the

crisis period.

4. Accept the public as a legitimate partner in managing an emergency. Recognize the public's right to know the risks that it faces as well as protective actions that it can take, and plan for the prompt sharing of this information so that people can freely carry out their own informed decisions.

5. Listen to the public before and during the emergency. Find out what people know, think, or want done about risks, and use this to inform communication and emergency response planning. Acknowledge people's concerns, even if they do not conform to scientific risk assessments. Put yourself in their place and adapt messages.

8. Communicate with compassion, concern, and empathy. Recognize the human dimensions of the emergency, acknowledge people's distress and extend genuine sympathy and understanding.

9. Respect the unique communication needs of diverse audiences. Be mindful of differences in cultural background, immigrant status, education, technological adeptness, hearing and seeing abilities, and other factors that influence information uptake and processing. Use clear, non-technical language along with graphics to clarify messages; employ multiple language translations where appropriate.

11. Convey messages of self-efficacy. Provide specific information to the public on how to reduce any potential harm and what can be done to help others. Protective messages can reduce material harm as well as enhance morale by restoring a sense of control over uncertain and menacing conditions.

12. Monitor public responses and update communication efforts to meet people's evolving information needs.

NOTE: Emphasizes the importance of communication partnerships and building/maintaining them outside emergencies. Mentions broadening media to include social media. Adapt messages to reach wider audience.

NOTE: The primary focus of this article is FDA's communication around RCTs and experimental vaccines and treatments. Similar to findings from West Africa, it notes the importance of addressing public concerns and not merely sticking to clinical or technical statements. Acknowledge the arguments of the other side. Address the underlying values, as well as cultural norms and moral concerns.

Further recommendations include building trust and credibility outside of crisis time, tailoring messages for specific populations, use trusted communication sources (local healthcare providers), ensure special focus for minority populations.

Credibility: High

Sugg, C. (2016). "Coming of age: communication's role in powering global health." Retrieved 4 Jan 2017, 2017, from http://downloads.bbc.co.uk/mediaaction/policybriefing/role-of-communication-in-global-health-report.pdf.

In addition to the limited funding for well-planned health communication efforts, programmes have not consistently integrated lessons learned from past practice. Successful health communication programmes have shown the importance of underpinning interventions with sound behavioural analysis, rooted in socioecological understanding of change and new insights from behavioural science. They have also shown the need to move beyond the idea of health communication as top-down "messaging" to something that encompasses dialogue and respects the

opinions of those most affected by particular health challenges. Too often, however, these key ingredients are missing.

NOTE: Discusses community engagement and the importance of tapping into local culture, structures, organizations, and training local media. Social media. Importance of local ownership of communication & messages. Many examples of the way SBCC has saved lives and dollars in LMIC. Emphasizes the social nature of health communication - not just individual focus, but societal, cultural, knowledge, attitudes, norms. Communication needs to take place within and between all levels of society. Donor funding needs to be systematic & sustained.

Credibility: High

Sustersic, L. (2015). Social Mobilization in the Freetown Peninsula during the Ebola Epidemic 2014-2015: Lessons Learned, Welthungerhilfe.

Social mobilization is the key link that enabled the Ebola response to be effective. However, fight against Ebola is a collaborative effort: it is important to recognize that only local communities and local leadership have the knowledge necessary to design effective measures and the leverage to implement them. The project has successfully found the balance between delegating sensitization activities to the communities and providing an efficient system of support and supervision. Media involvement was key to ensure public awareness. Finally, from the beginning the committed backing of the official Ebola response structures were essential to success. At this intermediate stage (one and a half months of project life in front of us), success is indicated by change in practices and the clear decline is cases in all target communities. This gives us the confidence to state that the project contributed significantly to halting the spread of Ebola in the Peninsula.

NOTE: Mentions the importance of working through and with local religious and other group leaders and using a participatory approach. Use local media. Mentions social media, specifically What'sApp. Also mentions integrating efforts with district authorities, including military. Communities taking the lead on suggesting activities.

Credibility: Moderate

Turner, M. M., et al. (2016). "Ebola risk communication project in Liberia: Lessons in crisis communication." from http://healthcommcapacity.org/wp-content/uploads/2016/09/GW-Report-Ebola-Risk-Communication-Project-LIberia_Lessons-in-Crisis-Communication1.pdf.

Recommendations:
1) Engage in pre-crisis planning - SMS rumour monitoring system; media meetings for lessons learned & how to do better next time
2) Express compassion, concern, empathy - from all levels of leadership and in messages; train responders in this
3) Forge public partnerships - media should provide info on what people can do to help respond
4) Listen to and understand the concerns of the public - media should specifically invite public response and feedback; engage them in the dialog process
5) Communicate honesty, candor, openness - when citing expertise, also need to indicate trustworthiness; train media about how to convey trustworthiness
6) Accept uncertainty and ambiguity - communicate about this, rather than certainty with no room for nuance
7) Regard crisis communication as an on-going process & communicate this
8) Collaborate & coordinate with credible sources
9) Communicate self-efficacy and response-efficacy - helping people know what actions to take, believe that they are capable of taking those actions, and that those actions will have a positive effect

Credibility: High

United Kingdom House of Commons International Development Committee (2016). "Ebola: Responses to a public health emergency, Second Report of Session 2015-16." Retrieved 1 Dec 2016, 2016, from http://www.publications.parliament.uk/pa/cm201516/cmselect/cmintdev/338/338.pdf.

We were told throughout the inquiry about the importance of community engagement in achieving an effective response. Two significant factors in the spread of the disease were cultural practices, such as unsafe burial, and distrust in the authorities and health sector. We recommend therefore that DFID engage communities earlier in future outbreaks, especially through trusted local, tribal and faith leaders, established voluntary organisations and civil society. DFID could also use anthropologists to facilitate this. Now that the Ebola crisis is over, it is vital that every effort is made to eradicate FGM in Sierra Leone and worldwide.

NOTE: Mentions insufficient communication as contributing to the epidemic's severity. Discusses cross-government working, crises expenditure, and community engagement. Notes about responding to early warnings could pertain to inter-agency coordination.

Credibility: High

United Nations Children's Fund (UNICEF) (2015). "Ebola: Battling for zero, working for recovery." Retrieved 6 Dec 2016, 2016, from https://www.unicef.org/emergencies/ebola/files/Ebola_update_7_2015.pdf.

The Ebola response has shown just how critical community engagement is. Where communities have assumed safe behaviours and taken it upon themselves to track down Ebola cases and contacts, transmission has dropped. Communities are the best-placed to know if there are any diseases in their midst, and are essential to successful infection prevention measures. That is why it is so important to engage them early in the recovery process, setting up or improving social services centres at the local level and strengthening district authorities, while at the same time building the capacity of national ministries to guide the delivery of basic services. Recovery efforts should also aim to maintain positive social behaviours that emerged during the Ebola outbreak, such as handwashing practices.

UNICEF has capitalized on existing relationships with local leaders, and further engaged traditional influencers – including paramount chiefs, clerics, women, youth groups and teachers – to reach communities. Thousands of UNICEF-supported social mobilizers have been deployed to help promote healthy behaviours and support case finding and contact tracing. Support by community leaders is particularly important in convincing people to allow specialized teams to conduct safe and dignified burials, a tough task in a region where deeply-rooted burial rites often involve washing and touching the body. Because bodies can be highly infectious, these ceremonies have been a major factor in spreading the disease. Social mobilizers are out in force to help convince communities of the need to end the secret movement of cases and the washing of dead bodies that has propagated transmission in recent months.

Lists school-based programs as a primary route for communicating Ebola messages/education.

Credibility: Moderate

United Nations Children's Fund (UNICEF) (2015). "Ebola: Getting to zero - for communities, for children, for the future." Retrieved 5 Dec 2016, 2016, from https://www.unicef.org/emergencies/ebola/files/EbolaReport.pdf.

The Ebola response has shown just how critical community engagement is. Where communities have assumed safe behaviours and taken it upon themselves to track down Ebola cases and contacts, transmission has dropped. Communities are the best-placed to know if there are any diseases in their midst, and are essential to successful infection prevention measures. That is why it is so important to engage them early in the recovery process, setting up or improving social services centres at the local level and strengthening district authorities, while at the same time building the capacity of national ministries to guide the delivery of basic services. Recovery efforts should also aim to maintain positive social behaviours that emerged during the Ebola outbreak, such as handwashing practices.

NOTE: Although not discussed in depth, community mobilization is listed as the first step of immediate action.

Credibility: Moderate

United Nations Children's Fund (UNICEF) (2015). "Hot Spot Busters, a Community Focused Intervention in Sierra Leone ". Retrieved 18 Jan 2017, 2017, from http://ebolacommunicationnetwork.org/wp-content/uploads/2016/11/UNICEF_Hot_Spot_Busters5.pdf.

Some of the key lessons learned from this innovative and unique program are:
• Rapid and intense social mobilization is a highly useful approach;
• Use mobilizers from the community who understand the local culture;
• Create an enabling environment in the community;
• Involve women as mobilizers;
• Use new tools such as the RapidPro SMS system ; and,
• Sensitize the Paramount Chiefs at the outset to gain their buy in and support.

Credibility: Moderate

United Nations General Assembly (2016). "Protecting humanity from future health crises: Report of the High-level Panel on the Global Response to Health Crises." Retrieved 4 Jan 2017, 2017, from http://www.un.org/ga/search/view_doc.asp?symbol=A/70/723.

NOTE: Report lists community engagement as crucial to health crisis response, specifically mentioning that lack of community engagement and poor communication hampered response efforts. It recommends that the principles of community engagement be included in all training programs for national and international responders.

Specific elements listed: participatory, 2-way approach; engage with the full spectrum of local society, including traditional leaders, religious leaders, women, youth and other members of the community. This especially important in the context of mistrust of government. Self-efficacy messages. M&E and feedback. Anthropologists.

Credibility: High

United Nations Global Ebola Response (2015). "Ebola outbreak: updated overview of needs and requirements for January-June 2015." Retrieved 6 Dec 2016, 2016, from http://ebolaresponse.un.org/sites/default/files/onr2015.pdf.

Communities touched by an Ebola outbreak need support – in particular they need at be able to access the services essential for life and livelihoods. An Ebola outbreak can only be controlled successfully if the people it affects are in a position to own it, to act on it and to change their ways of life so that it reduces its hold on their societies. They change their behaviour in ways that reduce the risk of transmission of Ebola within their community – including the early identification and reporting of people with Ebola, enabling them to isolate themselves and changing long-held healing and burial practices.

Country leadership, community ownership and effective coordination must be our guiding principles for the work.

A clear lesson from the response to date is that nothing can be done for people without engaging them directly. Empowering and equipping people with knowledge and resources have proven to be the most effective ways to stop the outbreak. Changing behaviour and values have been essential in reducing the spread of the virus by changing how people relate to family members who have died or someone in the community who is showing signs of the illness.

Requirement 2:

The building of trust is critically important: members of the affected communities are the primary source of information about the evolution of the outbreak and the primary actors in the response. The collective experience to date is that, without full community engagement, people who are ill will not come forward for diagnosis and treatment. Contacts will refuse daily check-ups to see if they themselves become ill (indeed, they are likely to run away and hide). Unsafe funerals will take place and lead to new chains of transmission. People will be scared and resist control measures. The response works when communities— through their leaders—are in a position to "own" both the outbreak and the response, to plan for themselves and to implement their plans.

MCA Social Mobilization and Community Engagement

■■ Support scale-up of social mobilization interventions to outside districts and border zones.

■■ Reinforce training of community mobilizers, including teachers, community health workers, community and religious leaders, in outreach techniques and messaging around the care and prevention of Ebola. Increase public awareness and social mobilization initiatives through local radio/television broadcasts; door-to-door campaigns; and cellphone messaging, promoting responsible behaviors, dispel rumours, and reduce stigma.

■■ Support the design, printing and distribution of Ebola prevention materials targeting women and girls and young people, translated into local languages through mobile public announcement systems, including use of taxi, and traditional communication channels.

■■ Support intensified information, education and communication of women, girls and young people, through regular broadcasting of Ebola prevention messages via national and local radio and TV.

Public awareness and community engagement around accurate messages listed as #3 of 10 program components.

NOTE: Specific budget numbers listed for social mobilization and community engagement. No funding listed for messaging.

Credibility: Moderate

United Nations Global Ebola Response (2015). "Making a difference: the global Ebola response, outlook 2015." Retrieved 6 Dec 2016, 2016, from http://ebolaresponse.un.org/sites/default/files/ebolaoutlook.pdf.

Our experience of this outbreak so far has repeatedly taught us an important lesson. Success can only be achieved if communities themselves understand the nature of the outbreak and act in ways that reduce their likelihood of becoming infected. The

elimination of the virus will only be achieved if those who are assisting with the response work under the supervision of national authorities, work closely together and ensure their efforts are offered in synergy. This calls for seamless coordination between actors, whether they work in villages and townships, at the level of local government areas, in the national capitals or at the international level.

Building trust: Members of the affected communities are the primary source of information about the evolution of the outbreak and they are the primary actors in the response. Building trust between responders and communities is critically important. The collective experience to date is that, without full community engagement, people who are ill will not come forward for diagnosis and treatment. Contacts will refuse daily check-ups to see if they themselves become ill (indeed, they are likely to run away and hide). Unsafe funerals will take place and lead to new chains of transmission. People will be scared and resist control measures.

The response works when communities—through their leaders—are in a position to "own" both the outbreak and the response, to plan for themselves and to implement their plans.

REQUIREMENT 5:

Supporting the responders:
According to Stephen Gaojia, Sierra Leone Incident Manager for Ebola: "We believe a decentralized response is going to be critical to get us to zero in the shortest possible time." His words are echoed by Anthony Lake, UNICEF Executive Director. "Rigidity in our operations, or in our thinking, is the enemy of success. We have to be flexible because this is not one big Ebola crisis; it is a shifting group of multiple local crises that have to be addressed.

A cookie cutter approach will not work; we have to be flexible in each local context. That means looking at the anthropology of different areas because cultural practices differ—for example burial practices in parts of Sierra Leone will be very different to the burial practices in parts of Liberia—and looking at the historical context of each community. If we are to succeed in convincing people to alter some of their deeply ingrained practices we have to understand the local characteristics of these communities in detail, in ways we have not before."

For example, areas exhibiting most success in reducing and eliminating the incidence of Ebola have been those where the local community has become educated and actively engaged in practices that minimize the possibility of transmission. Significantly less success has been achieved in locations where the population exhibits reticence—fear or denial, sometimes manifested in violent rejection of community outreach workers and medical teams.

Credibility: Moderate

United States Environmental Protection Agency (EPA) (2015). "Community Engagement and Case Analysis Methods for Developing Post-Incident Risk Communication Strategies for Intentional Biological Environmental Contamination Incidents--Final Report. ." Retrieved EPA/600/R-15/126, from https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=528739.

In addition to results of Phase 2 research activities, this report includes recommendations for post-incident decontamination and clearance communication that have been informed by findings. The recommendations include: the existence of clear response plans; involvement members of the media; culturally sensitive messages; and continued communication throughout recovery efforts. Strategies suggest a means for public health

officials and emergency responders to communicate with stakeholders, the media, and the myriad publics they serve to support an understanding of post-contamination activities.

Implications for best practices:
1. Ensure that clear response plans exist and that they include clearly defined roles for those implicated in a crisis response and recovery, particularly regarding the decontamination and clearance phases of a crisis.
2. Crisis planning should involve, to the fullest extent possible, members of the media who will be charged with providing information to the public.
3. The importance of informed audience segmentation cannot be overstated.
4. The data from this phase supports the recommendation that the Best Practices model be expanded to include an additional practice, i.e., to communicate recovery efforts.

Credibility: High

University of Minnesota (2015). "Recommendations for accelerating the development of Ebola vaccines: report & analysis." Retrieved 2 Dec 2016, 2016, from http://www.cidrap.umn.edu/sites/default/files/public/downloads/ebola_virus_team_b_report-final-021615.pdf.

Begin immediately.
CE activities should be under way specifically to (1) consult with national health ministries and provide any needed educational resources and training and (2) address within communities any general or specific potential perceived barriers to vaccine acceptance. In addition communicating vaccine characteristics and target populations to planners needs to happen as soon as possible so they can align vaccination strategies with appropriate CE efforts.

Promote West African leadership.
Trusted leaders from the affected countries should drive CE, with support from external partners as appropriate and requested. Leaders selected by their communities rather than imposed on them by others are essential to CE efforts that are culturally informed, are practical, and build trust.

Promote inclusivity and collaboration.
A broad definition of CE is recommended. Special efforts should be made to identify overlooked stakeholders, including women, who may have untapped strengths to mobilize their communities. To the extent possible, vaccine CE efforts should link to the successful treatment collaborations of local and outside healthcare workers whose management of the epidemic involves building trust.

Employ lessons learned to inform Ebola strategies.
For example, hardest-hit countries should consider creating structures similar to the Nigerian Northern Traditional Leaders Committee for Primary Care and Polio Eradication as a way to formally engage with traditional and religious institutions and influential individuals who can reduce misinformation and stigmatization and bring transparency to ethical aspects of Ebola vaccine.

Match strategies to each country.
To be successful, vaccination campaigns should be unique and appropriate to each country affected by the epidemic. As such, embedding vaccine delivery into a multifactorial approach to halting Ebola morbidity and mortality may help prevent perceptions of vaccination efforts as invasive or disconnected from traditional and holistic views regarding strength and resilience.

Ensure transparency.

Ultimately, the acceptance of Ebola vaccines depends on whether recipients trust them. Such trust builds when vaccine-related decisions are transparent, when community priorities are considered and built into vaccination strategies, and when ethical principles inform community engagement and are clearly evident.

Credibility: High

Wilkinson, S. (2016). "Using media and communication to respond to public health emergencies: lessons learned from Ebola." from http://downloads.bbc.co.uk/mediaaction/pdf/practicebriefings/ebola-lessons-learned.pdf.

NOTE: Document notes that communication was not prioritized at the beginning. Local media was not informed and trained on how to cover the outbreak. Building local media capacity would have been good as they speak local languages, dialects, etc. Local radio is particularly widespread. Rather than viewing local media merely as a means to distribute top-down messages, they could and should have been used for debate forums, addressing specific concerns and holding leaders accountable.

Evidence-based messages (avoid contact with bodily fluids of infected & dead) were not distinguished from uncertain messages (eating bush meat). Lack of message coordination.

What worked was a consortium (SMAC) of actors working through local religious and community leaders, social mobilizers and local radio. The consortium ensured coordination not only of interventions, but also of messages. Also of import - creating messages to address people's concerns vs. strictly epidemiologically-oriented messages. Local, trusted voices, people locals relate to vs. distant experts. Radio drama.

Positive, constructive messages - treatment & survival possible, what they can do to limit disease spread vs. negative - incurable, untreatable, highly contagious. Encourage self-efficacy or no behavior change.

Credibility: High

World Health Organization (2015). "Accelerating progress on HIV, tuberculosis, malaria, hepatitis and neglected tropical diseases: A new agenda for 2016-2030." Retrieved 11 Dec 2016, 2016, from http://apps.who.int/iris/bitstream/10665/204419/1/9789241510134_eng.pdf.

Ownership, leadership and advocacy. Country level ownership and leadership was the basis for action, particularly the involvement and participation of governments, communities, nongovernmental organizations (NGOs) and activists. For example, country-level leadership was crucial to increasing domestic funding for NTD programmes in middle-income countries.

Grass-roots partnerships that brought together activists and NGOs also played an important role in driving different agendas, and many disease response strategies now include significant rights-based components and an emphasis on community empowerment.

Health system strengthening. Although health system strengthening was not an explicit focus of the MDGs, many countries made multiple investments in specific components of health systems that led to improvements in key areas. Similarly, many countries initiated or developed pro-poor health policies that support progress towards universal health coverage (UHC) targets. Reciprocally, delivery of interventions and services for infectious diseases were important in supporting and improving health systems, notably by promoting evidence-based policies and rolling out cost-effective interventions, improving basic health infrastructure and commodity delivery systems, establishing or improving effective M&E and surveillance systems, building and strengthening laboratory capacity

and networks, expanding and training the health workforce and scaling up community-based programmes.

NOTE: While these diseases aren't the shocking headlines of Ebola and MeRS, they are also epidemics and halting them follows a similar process. This document specifies the importance of risk and behavior change communication (p. 38, listed as 52 in .pdf) and social mobilization (p. 44, listed as 58 of 79). It also mentions the importance of CHWs and that progress was due in part to greater emphasis on community-based initiatives (p. 15, 29 of 79). Also mentions advocacy, partnership and collaboration (p. 21, 35 of 79). Several mentions made of community empowerment and communities deciding how, when and by whom treatment should be administered.

Discusses funding issues, but not specifically risk communication funding.

Credibility: High

World Health Organization (2015). "Ebola Interim Assessment Panel Report by the Secretariat." Retrieved 30 Nov 2016, 2016, from http://apps.who.int/gb/ebwha/pdf_files/WHA68/A68_25-en.pdf.

NOTE: Report discusses the Ebola crisis, including communication and coordination issues, not in terms of what works and best practices, but in terms of what didn't work. Specifically mentions that community engagement was not handled well and that this contributed to the outbreak's spread.

Traditional cultural practices, including funeral and burial customs, contributed to virus transmission, yet culturally sensitive messages and community engagement were not prioritized.
Essentially, bleak public messaging emphasized that no treatment was available and reduced
communities' willingness to engage; medical anthropologists should have been better utilized to
develop this messaging. It must also be realized that the fact that communities were already in a post conflict situation manifested itself in high levels of distrust in authority. Owing to an extent to a lack of involvement on the part of the broader humanitarian systems, the nongovernmental organization resources, such as community development workers and volunteers, many from the countries and communities themselves, were not mobilized in the early stages. Given WHO's extensive experience with outbreaks, health promotion and social mobilization, it is surprising that it took until August or September 2014 to recognize that Ebola transmission would be brought under control only when surveillance, community mobilization and the delivery of appropriate health care to affected communities were all put in place simultaneously.

Credibility: Moderate

World Health Organization (2015). "Ebola Virus Disease Preparedness: Taking Stock and Moving Forward." Retrieved 30 Nov 2016, 2016, from https://extranet.who.int/iris/restricted/bitstream/10665/152132/1/9789241508421_eng.pdf.

Following the presentation of the key findings of the PST missions, discussions focused on the importance of community engagement and communication. Key points included:

 Community engagement is the corner stone to the response to the EVD outbreak. Without effective community engagement, contact tracing and breaking chains of transmission is extremely difficult.

 For this reason, Mali, in particular, has engaged anthropologists for a thorough understanding of the culture and attitudes of communities, to enable targeted

communications and foster community engagement.

 The critical nature of communications with communities, especially in countries where communications is through the spoken word was highlighted. Many of the cultural practices which have enabled the transmission of EVD have been curtailed during the emergency, but it is felt that these changes, such as changes in funeral practices, should be maintained in the long term, as it is uncertain where this disease may recur.

Note: Includes some detailed breakdown of what public awareness and community engagement entails
 Establish forum for engaging at different levels
 Strengthen existing structures and civil society
 Link public health communication with community communication
 Engage volunteers
 Utilizing human resources to operationalize staff
 Connect with religious leaders, social media, business sectors, national organizations.
Some discussion of coordination.

Credibility: Moderate

World Health Organization (2015, 2015-11-09 18:57:24). "One year into the Ebola epidemic: a deadly, tenacious and unforgiving virus." WHO. Retrieved 30 Nov 2016, 2016, from http://www.who.int/csr/disease/ebola/one-year-report/nigeria/en/.

Discusses factors that contributed to the outbreak's spread, one of which was how risk communication was carried out. Also analyzes what contributed to Nigeria, Mali and Senegal's successful responses to Ebola outbreak, including mention of ERC.

The government generously allocated funds and dispersed them quickly. Isolation facilities were built in both cities, as were designated Ebola treatment facilities. House-to-house information campaigns and messages on local radio stations, in local dialects, were used to ease public fears. Infrastructures and cutting-edge technologies in place for polio eradication, were repurposed to support the Ebola response, putting GPS systems to work for real-time contact tracing and daily mapping of transmission chains. Contact tracing reached 100% in Lagos and 99.8% in Port Harcourt.

Dakar was in a fortunately position as it is home to a world-class Senegalese foundation, the Pasteur Institute and its laboratory, which is fully approved by WHO to test quickly and reliably for viral haemorrhagic fevers, including Ebola. In an important innovation, Senegal set up a separate centre devoted to emergency Ebola measures, thus freeing the health system to continue to deliver routine services. That measure, backed by massive public information campaigns, helped relieved public anxieties and encourage cooperation with control measures.

Credibility: Moderate

World Health Organization (2015). "WHO Emergency Reform Workshop Report: Community Engagement." Retrieved 2 Jan 2017, 2017, from http://www.who.int/about/who_reform/emergency-capacities/er-community-engagement-26-27-nov-2015.pdf?ua=1.

NOTE: Document presents a thorough discussion of the nuts and bolts of community engagement - who needs to be involved, timing, etc.

Credibility: Moderate

World Health Organization (2015). "WHO strategic response plan, West Africa Ebola Outbreak." Retrieved 1 Dec 2016, 2016, from

http://apps.who.int/iris/bitstream/10665/163360/1/9789241508698_eng.pdf.

Safe and dignified burials

All countries now have sufficient capacity to bury all of the deceased in a safe and dignified manner. There are currently 210 burial teams active across the three countries. While this capacity has played a crucial role in helping to dramatically reduce the number of cases, some problems persist. A number of Ebola deaths continue to occur in communities (indicating that cases are not always coming forward for isolation and treatment) and unsafe burials continue to be documented, especially in Guinea and Sierra Leone. WHO, with the support of UNAIDS, has worked with faith-based organizations to develop safe and dignified burial protocols that are currently being used. While progress has been made, there are still instances where communities perceive that there is not enough allowance for prayer and spirituality during burial services. This can sometimes lead to resistance and unsafe burial practices. More work needs to be done to address these issues.

Community engagement

WHO has worked to strengthen community engagement in order to build and maintain trust between local communities and frontline workers. This has included informing the selection, prioritization and adoption of appropriate prevention and control measures through dialogue between communities and technical teams. WHO has also worked with communities to reinforce the key actions that they can take, counter misinformation that they may have received and mitigate misinterpretation of health advice by proactive listening and addressing community concerns and fears.

To this end, WHO has engaged anthropologists to work with community and religious leaders to address fear and stigma of the disease, to negotiate alternatives and adaptation of religious and cultural practices and to encourage seeking treatment through dialogue with communities. WHO has coordinated the inputs of specialized disciplines and professional networks to develop a community engagement model, based on best practice, for the safe and rapid roll out of the Ebola treatment and community care centres as well as interim guidance on community engagement for blood donors.

In collaboration with UNICEF and other partners, systems are being put in place to ensure community engagement methodologies are being applied to constructively manage dialogue with communities. While progress has been made, it is critical that service providers continue to build trust and make sure services are responsive to community concerns and needs. Social and traditional media have been used to reach millions of people in the three most-affected countries as well as in the 14 highest- and high-risk countries in the African region. By promoting community approaches and engaging survivors to work alongside other responders, WHO is helping to minimize the stigmatization of communities affected by Ebola.

The capacity to systematically and routinely develop and execute tailored community engagement strategies will need to be strengthened at the district level. Respectful and timely engagement of communities before and during critical response events, such as case investigations and burials, can mitigate community resistance and ensure support for and the safety of operations. Tailored and targeted strategies to engage with different groups – chiefs, religious leaders, women and youth – are required. Special attention needs to be paid to more effectively reaching out to women's groups and HIV/AIDS networks. Similarly, response teams need to be sensitive to and aware of the community context when responding. Anthropological analysis combined with expertise in community engagement and strengthening the leadership of health promotion is proving effective at

guiding operational and technical
approaches so that the voices and perspectives of communities are taken into account during decision-making.

Credibility: Moderate

World Health Organization (2016). "Global tuberculosis report 2016." Retrieved 11 Dec 2016, 2016, from http://apps.who.int/iris/bitstream/10665/250441/1/9789241565394-eng.pdf.

Engagement of communities, nongovernmental and civil society organizations is at the heart of the End TB Strategy. Community-based TB activities cover a wide range of activities that contribute to the detection, referral and treatment of people with drug-susceptible, drug-resistant and HIV-associated TB. They are conducted outside the premises of formal health facilities (e.g. hospitals, health centres and clinics) in community-based structures (e.g. schools, places of worship, congregate settings and markets) and homesteads. Community health workers and community volunteers carry out community-based TB activities. They can be part of the public health services or nongovernmental or other civil society organizations. ENGAGE-TB is an approach to integrating community-based TB activities into the work of these organizations. (p. 73, 84 of 214)

Credibility: High

World Health Organization (2016). "Zika Strategic response plan quarterly update July-September 2016." from http://apps.who.int/iris/bitstream/10665/250626/1/WHO-ZIKV-SRF-16.4-eng.pdf?ua=1.

Prevention activities are ongoing for the most at-risk groups, namely pregnant women, women of child-bearing age and their partners. Prevention strategies, including those for mass communication and community engagement, focus on the elimination of mosquito breeding sites, personal protection, prevention of sexual transmission of the virus and adequate information about Zika-related risks during pregnancy.

NOTE: Provides budget information for prevention, most of which is risk communication and community mobilization.

Credibility: High

World Health Organization (ND). "Report of the Ebola Interim Assessment Panel." Retrieved 6 Dec 2016, 2016, from http://www.who.int/csr/resources/publications/ebola/report-by-panel.pdf.

NOTE: No date listed on document. 2015 assumed & listed in greylit.org

The Panel is surprised and dismayed by serious gaps in the early months of the outbreak in terms of engaging with the local communities; some of these gaps still exist in the late phase of the outbreak, which shows that messaging needs to be continuously refined so as to be responsive to the changing epidemiological situation. Traditional cultural practices, including funeral and burial customs, contributed to virus transmission, yet culturally sensitive messages and community engagement were not prioritized. Essentially, bleak public messaging emphasized that no treatment was available; this reduced communities' willingness to engage. Medical anthropologists and other social scientists should have been better utilized to develop appropriate messaging. Because many communities were in a post-conflict situation, they had high levels of distrust in authority. Owing in part to a lack of involvement on the part of the broader humanitarian systems, the resources of nongovernmental organizations, such as community development workers and volunteers, many from the countries and communities themselves, were not mobilized in the early stages. Given WHO's extensive experience with outbreaks, health promotion and social mobilization, it is surprising that it took until August or September 2014 to recognize that Ebola transmission would be brought under

control only when surveillance, community mobilization and the delivery of appropriate health care to affected communities were all put in place simultaneously.

56. The difficulty of effectively engaging communities was a problem that could have been foreseen had a social and political analysis been conducted to complement the epidemiological assessments. For example, in Guinea, there is considerable mistrust in the authorities, following a long period of civil upheaval. During the Panel's visit there, it was clear that communities still have not been fully engaged, as demonstrated by the fact that cases who do not appear on contact lists continue to be found and cases remain reluctant to give contact information. In Liberia, there was more activity on the ground, even in the early days of the outbreak. For example, the United Nations Mission for Liberia (UNMIL) disseminated messages through local radio, in 17 different languages. In Sierra Leone, there is less certainty about early community engagement, but large numbers of nongovernmental organizations were activated later in the emergency. Police forces, national militaries, and other security actors were involved to different extents; in future, their roles need to be carefully defined for maximum effectiveness.

57. Engagement with local community leaders is essential. Women, who were often not mobilized effectively in this outbreak, are particularly important to this effort. The engagement of women and women's organizations is critical to changing behaviours and educating communities. As a medical anthropologist who was enlisted to work in the response, said, "Ebola is a fire; women are the water. And it is water that puts out the fire".

58. The Ebola crisis has confirmed the absolute necessity of community engagement in a public health emergency. The Panel heard this over and over in the countries affected. As one community leader in Liberia said: "at first, there was confusion – we didn't know what Ebola was, what to do. We didn't know where to start; there were dead bodies in all our houses; rumours about witchcraft. Then we organized ourselves, educated other community members about hand washing, touching, and how to handle the sick and the dead." In many cases, the communities had to adapt long-held traditional and cultural practices to the reality of this deadly disease.

59. Social science expertise is critical to understanding local beliefs, behaviours and customs. These experts can inform those who are at the front line, enabling them to better understand the context and work more effectively with communities to change behaviour. This must become part of standing protocols and standards for health emergencies.

Credibility: Moderate

World Vision (2016). "Still Surviving Ebola: Emergency and Recovery Response in Sierra Leone ". from http://www.wvi.org/sites/default/files/Ebola%20Response%20Report.pdf.

As in any emergency, people need to receive information directly from recognised, trusted local leaders – paramount chiefs, pastors, imams, teachers and health workers – who respect and understand their culture and religious traditions. Citizens don't want to be told what to do; they want to participate in finding and owning workable solutions to protect themselves, their children and their communities.

NOTE: Document mentions work through grassroots networks and faith leaders, as well as other community mobilization activities. Also discusses compromise solutions found to enable safe burials and meet community wishes to honor dead, using faith leaders to help spread safe burial practices.

Credibility: Moderate

Wright, S., et al. (2015). "A wake-up call: Lessons from Ebola for the world's health systems." Retrieved 6 Dec 2016, 2016, from https://www.savethechildren.net/sites/default/files/libraries/WAKE%20UP%20CALL%20REPORT%20PDF.pdf.

This document focuses primarily on lessons for building resilient health systems. However, in one place is does mention awareness-raising and community engagement as characteristics of resilient health systems. (p. 3)

Credibility: High

Y Care International (2016). "Sierra Leone YMCA Ebola Outbreak Emergency Response Evaluation Report." Retrieved 30 Nov 2016, 2016, from http://1c8puy1lylrov7ssf1oz3o22.wpengine.netdna-cdn.com/wp-content/uploads/2016/03/SLYMCA-Ebola-Emergency-Response-Evaluation-Report.pdf.

NOTE: Presents YMCA's lessons learned from the Ebola outbreak response. Does not appear to address risk communication directly, but does deal with community engagement, collaboration and funding. Lack of funding hindered response activities at the beginning.

Community engagement is addressed at length. Community engagement methods used included radio jingles, pamphlets, posters, banners, music on the radio and at public meetings, participation in TV and radio talk shows, text messaging, public outreach events and door-to-door visits. Local young people served as volunteers for this outreach work, as were representatives from women's groups, tribal leaders, youth groups, herbal healers, student associations, rider & driver associations and market groups. This ensured local credibility and trust. Their effectiveness won them nomination to the Social Mobilization Pillar of the National Ebola Taskforce.

Credibility: CASP - low; AACODS – Moderate

Q10: What are the best social media channels and practices to promote health protection measures and dispel rumours and misinformation during events and emergencies with public health implications?

Abramson, D. and R. Piltch-Loeb (2016). "U.S. Public's Perception of Zika Risk: Awareness, Knowledge, and Receptivity to Public Health Interventions." from http://publichealth.nyu.edu/content/dam/mph/documents/PiR2%20Zika%20Report_rf%20(1).pdf.

1. Understanding the public's primary source of information for public health threats such as Zika is a critically important factor in promoting awareness and knowledge. Those members of the public who said that conventional channels such as broadcast, print, and online news media served as their primary source of information were nearly five times as likely to be aware of Zika than were those who relied upon family, friends, or social media. And those who relied upon government sources of information were nearly three times as likely to be knowledgeable about Zika as were those who relied upon informal sources and social media. Although this does not account for the "amplification" effect that can occur with media of many types—for example, in which a governmental pronouncement or a scientific finding is first amplified by conventional media and then further amplified by social media—it does suggest that the most basic means for educating the public about the general contours of a threat such as Zika may still rely upon the more traditional channels of conventional media and government campaigns.

Credibility: Moderate

Assessment Capacities Project (ACAPS) (2015). "Ebola Outbreak, Liberia: Communication: Challenges and Good Practices." from https://www.acaps.org/sites/acaps/files/products/files/u_liberia_communication_challenges_and_good_practices_dec_2015-ilovepdf-compressed_ul.pdf.

While not commonly used until the peak of the crisis, technology served as a valuable tool for addressing the threat posed by rumours and misinformation and the need to quickly refute them. In November 2014 UNICEF launched the "U REPORT", a mobile phone application which enabled young people to access vital information and services (UNICEF 20/11/2014). U-report provides young people access to basic information on Ebola prevention and services available near them. In 2015, in collaboration with UNICEF, internews created the "DeySay" SMS system which uses text messages to monitor, track and report rumours relating to Ebola across different counties (Internews, 2015). The service was used by both the media and social mobilisation groups to adapt Ebola messaging. Through mobile phones, remote data collection was also made possible with different survey platforms to conduct real time assessments (GeoPol,30/09/2015). In the recovery phases, these assessments focused on economic recovery, including quarantine restricted areas.

Credibility: High

Assessment Capacities Project (ACAPS) (2015). "Ebola Outbreak, Sierra Leone: Communication: Challenges and Good Practices." from https://www.acaps.org/sites/acaps/files/products/files/v_sierra_leone_communication_challenges_and_good_practice_dec_2015_2-ilovepdf-compressed_ul.pdf.

+ In a context of widespread quarantines and emergency measures that aimed to minimise large gatherings, mobile phones became a valuable tool to collect and share information with blocked off communities.

In a context of widespread quarantines and emergency measures that aimed to minimise large
gatherings, mobile phones were a valuable channel to collect and share information with blocked off communities. As a result, practitioners should be trained to report effectively and responsibly through these channels and incorporate feedback mechanisms that

encourage audience participation.

Credibility: High

Francia, M. (2015). "Social mobilizers empower 'hotspot' communities to fight Ebola in Sierra Leone." Retrieved 18 Jan 2017, 2017, from https://www.unicef.org/infobycountry/sierraleone_78953.html.

NOTE: News article, but refers to changes in KAP study results performed before and after Hot Spot Busters interventions. Gives details about interventions and keys to their success: mobilizers are members of local communities, messages are tailored for each community, working with local leadership & groups, using SMS for real-time monitoring.

Credibility: Moderate

Global Communities Partners for Good (ND). "Stopping Ebola in its Tracks: A Community-Led Response." from http://www.globalcommunities.org/publications/stopping-ebola-in-its-tracks-2015.pdf.

Brute Force Implementation
In an age when every latest technological innovation is heralded as a silver bullet to one problem or another, it is worth noting that the Ebola response was an example where the most effective strategies could be considered "brute-force" strategies: it took 500 people engaged in burial and disinfection teams, 15,000 community leaders engaged in education/action planning in five months; hundreds of vehicles used in getting our responders to all ends of Liberia; and a donor willing to support this work to the scale it needed. No form of engagement was more effective than face-to-face discussion, and there are no technological short-cuts for safe burial and body management. This was not a crisis solved by new technologies and innovations, but by an enormous amount of human and other resources.

Credibility: Moderate

Health Communication Capacity Collaborative (2016). "HC3 Landscaping Summary Report on Zika Coordination and Communication in Four Countries: Honduras, El Salvador, Dominican Republic and Guatemala, March – April 2016." from http://www.zikacommunicationnetwork.org/sites/default/files/resource_files/Zika-Summary-Report-FINAL-03Aug2016.pdf.

NOTE: Document reports on current state of communication around Zika, notes what messages need to be focused on, mentions social media and coordination between different organizations. Also notes the need to train outreach workers in communication skills and messages. Mentions the need to keep the press informed and help shape their communications around Zika as well.

Social media both a source for rumour and for MoH messaging.

Credibility: High

Kamai-Yanni, M. (2015). "Never again: building resilient health systems and learning from the Ebola crisis." Retrieved 5 Dec 2016, 2016, from http://oxfamilibrary.openrepository.com/oxfam/bitstream/10546/550092/7/bp-never-again-resilient-health-systems-ebola-160415-en.pdf.

Using media: Nigeria used mobile phone technology to disseminate messages during the Ebola crisis in West Africa, while the Ugandan Ministry of Health trained journalists to report safely on the disease. Both resulted in dissemination of valuable information to the population.18

Credibility: Moderate

McKay, J. (2015). "Ebola response provides key lessons for risk communications; The CDC fumbled initial communications about Ebola transmission but recovered. What about next time?". Retrieved 5 Dec 2016, 2016, from http://www.emergencymgmt.com/health/Ebola-Response-Provides-Lessons-Risk-Communications.html.

Note: Also mentions using videos to increase staff capacity (know how to use PPE properly) vs. print-based instructions only. Also mentions effective use of social media in NY to squelch rumours after Dr. Craig Spencer tested positive.

Credibility: Low

Peremans, M. (2016). "OCB Ebola Review Part 4: Advocacy & Communication." Retrieved 12 Jan 2017, 2017, from http://cdn.evaluation.msf.org/sites/evaluation/files/attachments/ocb_evaluation_ebola_advocacy_final_0.pdf.

NOTE: Document provides a thorough analysis of the advocacy and communications efforts surrounding the Ebola outbreak. This includes analysis of barriers and interactions between and lack of coordination among different levels/authorities/types of organizations. Sources of information are listed only as available on request, so could not be evaluated. MSF's online and social media saw an upswing of use; blogs & Facebook too. Usage numbers provided.

Credibility: CASP - High; AACODS: Moderate - due to inability to review information sources

Rubyan-Ling, D. (2015). "Briefing Paper: Diaspora communications and health seeking behavior in the time of Ebola: findings from the Sierra Leonean community in London." Retrieved 9 Jan 2017, 2017, from http://www.ebola-anthropology.net/wp-content/uploads/2015/11/Diaspora-communication-and-health-seeking-behaviour1.pdf.

The Sierra Leonean diaspora was active in responding to the Ebola outbreak that hit Sierra Leone in March 2014, both by providing financial and material support, and through direct communication with relatives, friends and colleagues back home. This paper looks at the role of diaspora communications on health seeking behaviour in Sierra Leone. It examines the range of communication strategies employed by members of the diaspora; the dynamics of communications as the epidemic spread during 2014/15, and the role of diaspora associations in liaising with local institutions within Sierra Leone. It argues that their communications played an important and often innovative part in the cumulative mobilisation of local communities during the outbreak, although they were also prone to some of the same weaknesses as local public health efforts.

Credibility: Moderate to low

Savoia, E. and K. Viswanath (2015). "RICE – RIsk Communications Evaluation." from https://www.yumpu.com/en/document/view/31171296/rice-risk-communications-evaluation/6.

NOTE: Coordination and collaboration between risk assessment experts and communication experts is essential, as are transparency and trust. Communication needs to acknowledge a crisis immediately and be open about uncertainties. Political pressure undermines transparency and trust. Risk communication needs to be integrated at all levels - from local to global. All stakeholders need to be engaged in the communication process. Communication inequalities need to be taken into consideration. Discusses capacity and evaluation. Evaluation can be a media reporting level, as well as population level. Social media used to monitor what the public is saying about health issues.

Credibility: High

Schoch-Spana, M., et al. (2016). "How to Steward Medical Countermeasures and Public Trust in

an Emergency – A Communication Casebook for FDA and Its Public Health Partners ". from http://www.upmchealthsecurity.org/our-work/pubs_archive/pubs-pdfs/2016/MCMCommCasebookJune102016.pdf.

NOTE: Emphasizes the importance of communication partnerships and building/maintaining them outside emergencies. Mentions broadening media to include social media. Adapt messages to reach wider audience.

Credibility: High

Stalcup, M. (2016). Brazil's media ecology and public health communication.

This brief summarizes some key considerations about media and communication in Brazil, and the implications these have for the Zika virus response. The details have been collated from anthropological fieldwork in the city of Rio de Janeiro, media monitoring of Portuguese and English news reporting by major news organizations and independent media, and digital ethnography of Brazilian social media. These are general considerations that are broadly relevant to communicating public health information in Brazil, although media environments and strategies that will be effective vary between specific localities.

Brazil has one of the highest rates of medical social media use, with 87% of doctors using WhatsApp to communicate with their patients. Facebook use is also ubiquitous. For good or ill, traditional media and social media are now equal partners in Brazil's media world. One challenge is the difficulty in controlling messages. Once on the loose in cyberspace, video clips or other messages take on cyclical lives of their own, peaking, dying down, then resurfacing. This holds true for rumours as well as official messages.

NOTE: Phone is most prevalent form of media, followed by TV, then Internet. Newspapers were least used.

Credibility: High

Sugg, C. (2016). "Coming of age: communication's role in powering global health." Retrieved 4 Jan 2017, 2017, from http://downloads.bbc.co.uk/mediaaction/policybriefing/role-of-communication-in-global-health-report.pdf.

Social media played a role too. WhatsApp gave the BBC dispensation to set up an Ebola special service, lifting the limit for a broadcast group beyond its usual cap of 250 people. The social media service was able to post images, text and audio content from the World Health Organization (WHO), the Centers for Disease Control and Prevention, and the United Nations Children's Fund (UNICEF), to 20,000 subscribers, most of whom were in West Africa. BBC Media Action made localised two-way versions of the service that allowed it to hear from ordinary people about their needs. By the end of 2015 when the outbreak waned, BBC Media Action's WhatsApp channel for Sierra Leone had more than 15,000 subscribers.

Credibility: High

Sustersic, L. (2015). Social Mobilization in the Freetown Peninsula during the Ebola Epidemic 2014-2015: Lessons Learned, Welthungerhilfe.

NOTE: Mentions the importance of working through and with local religious and other group leaders and using a participatory approach. Use local media. Mentions social media, specifically What'sApp. Also mentions integrating efforts with district authorities, including military. Communities taking the lead on suggesting activities.

Credibility: Moderate

Turner, M. M., et al. (2016). "Ebola risk communication project in Liberia: Lessons in crisis

communication." from http://healthcommcapacity.org/wp-content/uploads/2016/09/GW-Report-Ebola-Risk-Communication-Project-LIberia_Lessons-in-Crisis-Communication1.pdf.

Recommendations:
1) Engage in pre-crisis planning - SMS rumour monitoring system; media meetings for lessons learned & how to do better next time
8) Collaborate & coordinate with credible sources
9) Communicate self-efficacy and response-efficacy - helping people know what actions to take, believe that they are capable of taking those actions, and that those actions will have a positive effect

Credibility: High

United Nations Children's Fund (UNICEF) (2015). "Hot Spot Busters, a Community Focused Intervention in Sierra Leone ". Retrieved 18 Jan 2017, 2017, from http://ebolacommunicationnetwork.org/wp-content/uploads/2016/11/UNICEF_Hot_Spot_Busters5.pdf.

Some of the key lessons learned from this innovative and unique program are:
• Rapid and intense social mobilization is a highly useful approach;
• Use mobilizers from the community who understand the local culture;
• Create an enabling environment in the community;
• Involve women as mobilizers;
• Use new tools such as the RapidPro SMS system ; and,
• Sensitize the Paramount Chiefs at the outset to gain their buy in and support.

Credibility: Moderate

University of Chicago National Research Center and The March of Dimes (2016). "The Zika virus: gaps in Americans' knowledge and support for government action." Retrieved 8 Dec 2016, 2016, from http://www.norc.org/PDFs/MarchOfDimes/Report_March_of_Dimes_NORC_Zika_Poll_090616.pdf.

Document presents primarily information about the state of Americans' knowledge about Zika. Also lists which sources of information are most likely to be believed (CDC, family doctors), but states that few have received information from these sources. Instead information is primarily derived from the media and is seen as unreliable. TV, radio, social media & blogs listed as most common sources of information.

Credibility: Moderate

Wilkinson, S. (2016). "Using media and communication to respond to public health emergencies: lessons learned from Ebola." from http://downloads.bbc.co.uk/mediaaction/pdf/practicebriefings/ebola-lessons-learned.pdf.

Also covers use of social media. Chat apps better than SMS because cheaper. What'sApp in particular. Also useful in tracking rumours.

Credibility: High

Q11: What are the best ways to communicate uncertainties to public audiences, at-risk communities, and stakeholders?

American Civil Liberties Union and Global Health Justice Partnership (2015). "Fear, politics and Ebola: How quarantines hurt the fight against Ebola and violate the Constitution." Retrieved 5 Dec 2016, 2016, from https://www.aclu.org/sites/default/files/field_document/aclu-ebolareport.pdf.

> Even when fulminant disease is present, those using personal protective equipment (PPE) properly within a well-equipped modern hospital have not contracted the disease. Nina Pham, the nurse who cared for Thomas Eric Duncan at Texas Presbyterian Hospital, contracted Ebola because she was not wearing proper PPE during Duncan's second visit to the hospital and because the decontamination protocols in place were inadequate.27 The breach in PPE was not emphasized in the early reporting surrounding Nina Pham, which gave the misimpression that transmission had occurred with proper equipment and protocols (such as proper decontamination) in place. This was an error in public communication of risk and of the nature of the cases in Texas, which undermined public confidence in public health officials and raised fears of a generalized epidemic in the United States.
>
> Scientists do not speak in absolute terms—they rarely say "never"—and this has made it difficult for the general public to understand how Ebola is transmitted and to gauge the risk to themselves and their families. Scientists, however, have attempted to address irrational concerns about the contagiousness of the virus. Vincent Racaniello, Professor of Microbiology & Immunology in the College of Physicians and Surgeons of Columbia University, surveyed 23 existing studies and case reports on Ebola disease, and found that transmission never resulted from contact with an asymptomatic person who subsequently developed Ebola. "All transmissions that could be assessed involved an obviously sick individual, and never from anyone who was healthy," he observed. In an interview, he concluded that the risk of contracting Ebola from an asymptomatic person is effectively zero, and that far greater risks are assumed by each of us in our everyday lives.
>
> Some scientists inadvertently fuelled the public's misunderstanding of the risk of Ebola by musing in the press about the possibility of the airborne transmission of the virus. Ebola cannot travel efficiently through the air, and though it can be aerosolized briefly in certain rare circumstances (such as intubations), and can spread through the splashing of large droplets (like any fluid-borne disease), it is not airborne. The likelihood of a human virus like Ebola mutating so as to change its mode of transmission is next to zero. Such a drastic change in mode of transmission has never been seen in a human virus before. While it is a theoretical scientific possibility, it is extraordinarily unlikely and should not drive public policy with respect to Ebola (any more than it should with respect to other non-airborne diseases such as HIV or hepatitis B). While open and free inquiry is a key part of scientific discourse, scaremongering in the pages of the New York Times about the remote possibility of airborne Ebola transmission, in the midst of public panic about an outbreak, was gratuitous and misleading, and contradicted a large body of scientific knowledge.
>
> Relates to communicating uncertainties
> Credibility: Moderate

McKay, J. (2015). "Ebola response provides key lessons for risk communications; The CDC fumbled initial communications about Ebola transmission but recovered. What about next time?". Retrieved 5 Dec 2016, 2016, from http://www.emergencymgmt.com/health/Ebola-Response-Provides-Lessons-Risk-Communications.html.

> The criticism was not that the CDC got it wrong but that the initial guidelines were communicated with certainty, in a way that suggested that Ebola was a well-understood disease.

"There's no question that the CDC's overconfident, over-reassurance exacerbated the American public's 'adjustment reaction,' its temporary overreaction to Ebola," wrote Sandman in an email. When the CDC changed its guidelines it made the initial recommendations look "insufficiently cautious" and incompetent.

Sandman wrote that the CDC started out very confident that the risk to health-care workers was negligible, ignoring examples of workers who had been infected in West Africa even with the use of protective equipment. Making matters worse, the public health establishment labelled the more alarmed voices as stupid or irrational.

Melissa McDiarmid, a professor at the University of Maryland School of Medicine, said there wasn't a consensus about ease of transmission and that the CDC, portrayed and taken as the authority, effectively squelched other health-care communities voicing differing opinions.

"There were other people in both the infection control community [biohazard] and the occupational health community that didn't think [transmission of the infection] was quite as tidy as CDC was portraying," McDiarmid said.

There were differing opinions about transmission and "hair splitting" about aerosol versus airborne transmission that created confusion, she said. "I know a lot of hospitals did not agree with the initial CDC guidance and had their first receivers and their Ebola designated people in protection as well as a complete coverage, which at first was not called for."

The reassessments by the CDC added to the controversy, and with an infection as deadly as Ebola, the stakes were too high not to take a stand toward caution. "It was not just opinion, there was some evidence that aerosol transmission, if not airborne transmission, was possible," McDiarmid said. "Maybe not likely, maybe not efficient but possible, and I think that confused the risk message given the severity of the consequences of an Ebola infection."

The lesson from the standpoint of many who have spoken on this issue is that it's OK, even wise to say, "We're not sure on this. We don't know for sure."

Credibility: Low

Richards, P., et al. (2015). "Village Responses to Ebola Virus Disease and its Prevention." from http://www.ebola-anthropology.net/case_studies/village-responses-to-ebola-virus-disease-and-its-prevention/.

The present document is the eighth and final report in a series presenting descriptive results of a survey of responses to Ebola and Ebola control in 26 villages in all three provinces of rural Sierra Leone, fieldwork for which was undertaken in December 2014. The report covers three villages in Gbo chiefdom, in Bo District. Some emphasis is placed on how inconsistencies of Ebola response are perceived at local level, and undermine trust. Ebola responders should not only improve the quality of their messages, but also concentrate on explaining aspects of the response that villagers find most puzzling, if trust is to be restored.

Our evidence suggests that most rural Sierra Leoneans have a good grasp of EVD infection pathways and react accordingly. Evidence of a downturn of Ebola infection in southern and eastern Sierra Leone predates much of the major international response towards the end of 2014. This is not to say that this effort was not needed, but to argue that local opinion was already pre-conditioned to the kinds of control measures needed to break the Ebola transmission cycle. In other words, villagers had learnt, even in

advance, to "think like epidemiologists". But local trust has been eroded by mixed messages and a failure on the part of responders fully to admit earlier mistakes and inconsistencies, and to explain, in terms meaningful to local populations, subsequent changes in policy on disease control. Here it is argued that trust could be restored if epidemiologists, and the Ebola response community more generally, learnt to "think like villagers". The data presented in this report, and in the seven that precede it, are intended to help that empathetic learning task.

Credibility: Moderate

Richards, P., et al. (2015). "What causes Ebola Virus Disease? Views from four villages on the edge of the Gola Rain Forest National Park, Sierra Leone." Retrieved 9 Jan 2017, 2017, from http://www.ebola-anthropology.net/wp-content/uploads/2015/02/Ebola-causes-and-questions.pdf.

NOTE: This document examines villager perceptions about what causes EVD. It raises an important issue about distinguishing between certainties and uncertainties in public health communications. The person-to-person spread of EVD is well documented and villagers recognize this. The causal link with eating bush meat is not proven and villagers note that they are being told not to eat bush meat even though this has not been proven as the cause of EVD. Implications for trust.

Credibility: Moderate

Savoia, E. and K. Viswanath (2015). "RICE – RIsk Communications Evaluation." from https://www.yumpu.com/en/document/view/31171296/rice-risk-communications-evaluation/6.

NOTE: Coordination and collaboration between risk assessment experts and communication experts is essential, as are transparency and trust. Communication needs to acknowledge a crisis immediately and be open about uncertainties. Political pressure undermines transparency and trust. Risk communication needs to be integrated at all levels - from local to global. All stakeholders need to be engaged in the communication process. Communication inequalities need to be taken into consideration. Discusses capacity and evaluation. Evaluation can be a media reporting level, as well as population level.

Credibility: High

Schoch-Spana, M., et al. (2016). "How to Steward Medical Countermeasures and Public Trust in an Emergency – A Communication Casebook for FDA and Its Public Health Partners". from http://www.upmchealthsecurity.org/our-work/pubs_archive/pubs-pdfs/2016/MCMCommCasebookJune102016.pdf.

6. Communicate with honesty, candor, and openness. Be truthful to foster credibility with the public and the media. Relate the truth as it is known, even if it may reflect poorly on the agency, and be frank about the potential severity of any crisis. Promptly make information accessible. Convey information uncertainties, strengths, and weaknesses.

7. Accept uncertainty and ambiguity. In an emergency, acknowledge the dynamism of the situation and the potential need to act before all the facts are known. Be prepared to explain the fluidity of conditions and the measures being taken to fill in the knowledge gaps. Address differing scientific perspectives and international variances as needed.

Credibility: High

Turner, M. M., et al. (2016). "Ebola risk communication project in Liberia: Lessons in crisis communication." from http://healthcommcapacity.org/wp-content/uploads/2016/09/GW-Report-Ebola-Risk-Communication-Project-LIberia_Lessons-in-Crisis-Communication1.pdf.

5) Communicate honesty, candor, openness - when citing expertise, also need to indicate trustworthiness; train media about how to convey trustworthiness

6) Accept uncertainty and ambiguity - communicate about this, rather than certainty with no room for nuance
7) Regard crisis communication as an on-going process & communicate this

Credibility: High

Wilkinson, S. (2016). "Using media and communication to respond to public health emergencies: lessons learned from Ebola." from http://downloads.bbc.co.uk/mediaaction/pdf/practicebriefings/ebola-lessons-learned.pdf.

Evidence-based messages (avoid contact with bodily fluids of infected & dead) were not distinguished from uncertain messages (eating bush meat). Lack of message coordination.

Credibility: High

Q12: What elements and timing of messages are best at influencing public/community levels of concern to motivate relevant actions to protect health?

Abramson, D. and R. Piltch-Loeb (2016). "U.S. Public's Perception of Zika Risk: Awareness, Knowledge, and Receptivity to Public Health Interventions." from http://publichealth.nyu.edu/content/dam/mph/documents/PiR2%20Zika%20Report_rf%20(1).pdf.

1. Understanding the public's primary source of information for public health threats such as Zika is a critically important factor in promoting awareness and knowledge. Those members of the public who said that conventional channels such as broadcast, print, and online news media served as their primary source of information were nearly five times as likely to be aware of Zika than were those who relied upon family, friends, or social media. And those who relied upon government sources of information were nearly three times as likely to be knowledgeable about Zika as were those who relied upon informal sources and social media. Although this does not account for the "amplification" effect that can occur with media of many types—for example, in which a governmental pronouncement or a scientific finding is first amplified by conventional media and then further amplified by social media—it does suggest that the most basic means for educating the public about the general contours of a threat such as Zika may still rely upon the more traditional channels of conventional media and government campaigns.

2. Promoting different public health interventions may require different communication strategies, particularly during a period of evolving scientific certainty. In this analysis we examined a behavioral, an environmental, and a clinical intervention. No single factor was associated with increasing the public's receptivity to all three of these interventions. The public was more receptive to a behavior change such as delaying pregnancy if they believed themselves at personal risk. However, that heightened personal risk was not associated with their willingness to accept a government program of indoor spraying. Instead, the public's willingness to accept that type of environmental intervention was much more related to their overall confidence in government. Lastly, the public's appetite for a clinical option such as federally-financed abortion services for Zika-infected pregnant women was associated with greater knowledge about Zika, regardless of their political ideologies. Risk communicators should consider highlighting different aspects of their messages—whether increasing knowledge of transmission routes, conveying the actual risks posed by various vectors, or promoting the trustworthiness of government or public health organizations—depending upon the intervention they wish to advance.

3. As with any potential health threat it is useful to know the public's appetite for various public health interventions, and the factors that would either spur or inhibit their acceptance of such actions, before the threat appears. The public health and scientific communities may be mobilized and vigilant about widespread Zika outbreaks, but for the moment, at least, the public is neither alarmed nor particularly activated about it.

NOTE: Does not evaluate specific risk communications, but does provide some information about KAPs over time, which would indicate risk communications' effectiveness.

Credibility: Moderate

ACF International (2015). "Community led Ebola management and eradication (CLEME)." Retrieved 9 Jan 2017, 2017, from http://reliefweb.int/sites/reliefweb.int/files/resources/Community%20Led%20Ebola%20Management%20and%20Eradication_Case_Study.pdf.

NOTE: Document provides detailed description of the CLEME process, including community mapping, collection of common ways of caring for people who are sick, simulating burials, walking through the community together, and re-visits for collecting feedback and adjusting the community action plan.

The CLEME process involved enabling communities to conduct their own analysis of the Ebola outbreak and what can and need to do about it, and providing technical assistance for implementing the communities' plans. Community support groups were formed, and visual tools and role games were used in order to ensure that all people could participate, regardless of literacy level. Topics covered included early detection of symptoms and early treatment, safe and dignified burials, avoiding body contact and body fluids, avoiding bush meat, accepting survivors, post-Ebola safe sex, and complying with contact tracing and quarantine.

Communities chose to create isolation rooms and install tippy taps for hand washing, and institute bi-laws to protect themselves. Implementation of by-laws was found to be particularly effective "when adopted at community level and decided by the community natural leaders."

Lessons learned and recommendations include: 1. On-going contextual analysis to address barriers and challenges faced by communities and adapt interventions accordingly. 2. Interventions need to address the differing needs of women, men, boys and girls.
3. Regular follow-up and feedback are needed to adapt the program to the changing situation. 4. Integrate Ebola and other health education into all community programs to prevent future outbreaks.

Credibility: Moderate

Assessment Capacities Project (ACAPS) (2015). "Ebola Outbreak, Liberia: Communication: Challenges and Good Practices." from https://www.acaps.org/sites/acaps/files/products/files/u_liberia_communication_challenges_and_good_practices_dec_2015-ilovepdf-compressed_ul.pdf.

Key findings:.
+ Put faith leaders at the forefront of the response: During the outbreak there were times where surveys revealed a rapid progression of the virus despite high basic awareness of Ebola and prevention methods (CDC, 10/2014). Research shows that Liberians were more afraid of the religious consequences of changing their behaviour than of catching Ebola. As a result, trusted community and faith leaders played a key role in containing the epidemic and should be at the forefront in all phases of the response.

+ Make use of story-telling and entertainment education: Research suggests that communications which capture the imagination were more effective outreach tools, as people who were engaged in a storyline were more open to both receiving information and to changing their attitudes and behaviours. This was particularly the case in the Ebola outbreak, especially among communities used to communicating orally. It provides an opportunity to embed key messages and leverages a traditional form of communication within that culture. (IOM, 07/01/2015).

+ Adapt top-down messaging to the needs of communities: Disconnected top-down health messaging approaches were largely ineffective. Key messages needed to be practical and relevant to the communication needs of affected communities. Feedback mechanisms and two-way communication must be encouraged to better understand and respond to the concerns of communities.

Credibility: High

Assessment Capacities Project (ACAPS) (2015). "Ebola Outbreak, Sierra Leone: Communication: Challenges and Good Practices." from https://www.acaps.org/sites/acaps/files/products/files/v_sierra_leone_communication_challenges

_and_good_practice_dec_2015_2-ilovepdf-compressed_ul.pdf.

Lessons learned:
Some of the most successful initiatives were the ones that 'triggered' communities to assess the outbreak themselves, its effects and likely impacts, creating a sense of urgency to develop community action plans and change their behaviours (CLEA, 11/2014).

Messages: Early messages designed to change the behaviour were counterproductive, as they failed to take into account deep rooted cultural practices and beliefs and context-specific difficulties (ICG, 10/2015; CAFOD, 2015). . The most efficient messages were adaptable enough to be culturally and regionally appropriate, repetitious and available in relevant languages.

Credibility: High

Davis, T. and A. e. Srinivasan (2016). "Ebola Barrier Analysis Compendium: Summary of Barrier Analysis Studies on Ebola-related Behaviors ". Retrieved 12 Jan 2017, 2017 from http://www.fsnnetwork.org/sites/default/files/BA_Ebola_Compendium.pdf.

a. The key determinants that are significant in almost all the studies noted here are perceived self-efficacy, perceived social norms, perceived positive and negative consequences of the behavior, cues for action and access.

b. For some of the behaviors related to Ebola, community leaders played an important role in bringing about a positive difference. Being a key stakeholder and a role model in their community, they can play a key role in the rapid uptake of preventive behaviors. However, not all leaders are trusted. There is a need to educate community leaders on communicable disease prevention and ensure that these leaders can be easily contacted by locals during a crisis. People are also highly influenced by the opinions and recommendations of their peers and family members, so moving life-saving information out to a higher proportion of community members (not just leaders) through trusted individuals is important in halting an epidemic. Volunteer peer educators (e.g., Care Group Volunteers) can be useful for this purpose.

Credibility: High

Ferraro, A. (2016). Rapid Assessment of Zika Awareness in Peru.

NOTE: Document presents Zika KAP findings for Peru. Most notable is the lack of knowledge about sexual transmission of Zika and the risk this poses for women and their fetuses/babies. Also notes that many WHO prevention guidelines are irrelevant to lower-income populations.

Credibility: Moderate

Health Communication Capacity Collaborative (2016). "HC3 Landscaping Summary Report on Zika Coordination and Communication in Four Countries: Honduras, El Salvador, Dominican Republic and Guatemala, March – April 2016." from http://www.zikacommunicationnetwork.org/sites/default/files/resource_files/Zika-Summary-Report-FINAL-03Aug2016.pdf.

NOTE: Document reports on current state of communication around Zika, notes what messages need to be focused on, mentions social media and coordination between different organizations. Also notes the need to train outreach workers in communication skills and messages. Mentions the need to keep the press informed and help shape their communications around Zika as well.

Credibility: High

Liberia Ministry of Health (2015). "National Knowledge, Attitudes and Practices Study on Ebola Virus Disease.". from http://ebolacommunicationnetwork.org/wp-content/uploads/2015/04/KAP-Study-Liberia-March-2015.pdf.

The KAP study has shown that at the time of the interviews, general awareness of Ebola was universal and knowledge of symptoms, transmission routes and prevention were reportedly very high. There was close to full support for core Ebola strategies (isolation of contacts, seeking early treatment at ETUs, contact tracing, and quarantine). Risk perception was low as 73% perceived that they were at no personal risk of getting infected in the next four months mainly because they said they practice all the desired preventive measures. Most participants said had adopted hand washing with soap, chlorine or some other disinfectant. The study has confirmed that radio is main source of information on Ebola and that government messages have highest credibility. As regards to survivors, the study shows that attitudes towards acceptance were largely positive albeit cautious.

There is need to address common misconceptions, especially about mosquitoes need to be addressed. EVD messages need more nuance to promote resumption of healthy interactions (immunization/schools/health care) while still discouraging most dangerous (some burial practices, hunting bats, other reservoirs). There is also need to address concerns about post-infection transmission that feed stigma against survivors. Interventions should also seek to strengthen health facility infection, prevention and control; and community systems for rapid remobilization if case of Ebola resurgence. Lastly, there is need for a follow up study that will focus on restoration themes (stigma, vaccines, health care utilization) in selected counties.

NOTE: Person-to-person communication (with family or health workers) were also listed as sources of risk communication information.

Credibility: High

Modarres, N. (2015). "Community Perspectives about Ebola in Bong, Lofa and Montserrado Counties of Liberia: Results of a Qualitative Study ". from http://ebolacommunicationnetwork.org/wp-content/uploads/2015/02/Liberia-Ebola-KAP-study_Research-Report_FINAL_10-Feb-2015.pdf.

NOTE: Recommendations include targeting groups with messages specifically tailored for them, keeping communities updated on Ebola status of the nation and their community, involving local community and religious leaders, work through existing infrastructure as they already have relationships with the local community, use local community members for task force, train local health workers in emergency response - including communication, involve survivors - their numbers and stories helped change public opinion about ETCs, involve communities and local leaders in follow-up activities - what did/didn't work for them. Local radio mentioned as credible source of health information, along with religious & community leaders, local health or task force workers and survivors.

Credibility: Moderate to high (some but limited interaction with literature)

Plan* (Avaliacao Monitoramento Pesquisa Social) (2016). Control measures of Aedes aegypti: focus groups research in Recife and Campina Grande Plan* (Avaliacao Monitoramento Pesquisa Social).

NOTE: Slide presentation covering many aspects of Zika, Dengue and Chikungunya outbreaks. Includes KAP findings that could help shape prevention messages.

Credibility: Moderate

Reyes, L. G. and R. I. Romero (ND). Reproductive decisions under threat of Zika in Iquitos Peru.

NOTE: Document presents issues surrounding Zika and reproduction in Iquitos, Peru. Generally discussions about contraceptive use take place only after conception. Recommendation to target Zika preventive messages to males, using their role of protector of their long term partner.

Credibility: Moderate

Richards, P., et al. (2015). "Village Responses to Ebola Virus Disease and its Prevention." from http://www.ebola-anthropology.net/case_studies/village-responses-to-ebola-virus-disease-and-its-prevention/.

The present document is the eighth and final report in a series presenting descriptive results of a survey of responses to Ebola and Ebola control in 26 villages in all three provinces of rural Sierra Leone, fieldwork for which was undertaken in December 2014. The report covers three villages in Gbo chiefdom, in Bo District. Some emphasis is placed on how inconsistencies of Ebola response are perceived at local level, and undermine trust. Ebola responders should not only improve the quality of their messages, but also concentrate on explaining aspects of the response that villagers find most puzzling, if trust is to be restored.

Our evidence suggests that most rural Sierra Leoneans have a good grasp of EVD infection pathways and react accordingly. Evidence of a downturn of Ebola infection in southern and eastern Sierra Leone predates much of the major international response towards the end of 2014. This is not to say that this effort was not needed, but to argue that local opinion was already pre-conditioned to the kinds of control measures needed to break the Ebola transmission cycle. In other words, villagers had learnt, even in advance, to "think like epidemiologists". But local trust has been eroded by mixed messages and a failure on the part of responders fully to admit earlier mistakes and inconsistencies, and to explain, in terms meaningful to local populations, subsequent changes in policy on disease control. Here it is argued that trust could be restored if epidemiologists, and the Ebola response community more generally, learnt to "think like villagers". The data presented in this report, and in the seven that precede it, are intended to help that empathetic learning task.

Credibility: Moderate

Schoch-Spana, M., et al. (2016). "How to Steward Medical Countermeasures and Public Trust in an Emergency – A Communication Casebook for FDA and Its Public Health Partners ". from http://www.upmchealthsecurity.org/our-work/pubs_archive/pubs-pdfs/2016/MCMCommCasebookJune102016.pdf.

4. Accept the public as a legitimate partner in managing an emergency. Recognize the public's right to know the risks that it faces as well as protective actions that it can take, and plan for the prompt sharing of this information so that people can freely carry out their own informed decisions.

5. Listen to the public before and during the emergency. Find out what people know, think, or want done about risks, and use this to inform communication and emergency response planning. Acknowledge people's concerns, even if they do not conform to scientific risk assessments. Put yourself in their place and adapt messages.

6. Communicate with honesty, candor, and openness. Be truthful to foster credibility with the public and the media. Relate the truth as it is known, even if it may reflect poorly on the agency, and be frank about the potential severity of any crisis. Promptly make information accessible. Convey information uncertainties, strengths, and weaknesses.

7. Accept uncertainty and ambiguity. In an emergency, acknowledge the dynamism of the situation and the potential need to act before all the facts are known. Be prepared to

explain the fluidity of conditions and the measures being taken to fill in the knowledge gaps. Address differing scientific perspectives and international variances as needed.

8. Communicate with compassion, concern, and empathy. Recognize the human dimensions of the emergency, acknowledge people's distress and extend genuine sympathy and understanding.

9. Respect the unique communication needs of diverse audiences. Be mindful of differences in cultural background, immigrant status, education, technological adeptness, hearing and seeing abilities, and other factors that influence information uptake and processing. Use clear, non-technical language along with graphics to clarify messages; employ multiple language translations where appropriate.

11. Convey messages of self-efficacy. Provide specific information to the public on how to reduce any potential harm and what can be done to help others. Protective messages can reduce material harm as well as enhance morale by restoring a sense of control over uncertain and menacing conditions.

12. Monitor public responses and update communication efforts to meet people's evolving information needs.

A rich body of literature on competing message frames highlights the importance of effective communication through framing issues, such as the need for clinical trials, using language that is salient (ie, relevant) to potential audiences and using strong messages that tap the power of emotion.88 In addition, the frequency and timing of these messages also play a role.89,90 From a risk communication standpoint, it is sensible to work the opposition's strongest points (eg, facts, arguments, emotions) into one's own statements.84 Speaking in ways that show genuine appreciation for alternate viewpoints and for a range of deeply held values, particularly how those underlying values are already incorporated into existing policy, can enhance the legitimacy of FDA positions. Framing current policy in terms of the opposition's values provides the audience context in which to evaluate, understand, and appreciate these positions. It is important that communication efforts be made in the midst of the debate, rather than after attention has drifted from the issue, since many audiences will no longer be primed to receive information... The use of familiar language and arguments in well-timed and regular communications can help effectively overcome competing message frames and improve overall communication efforts.

3. During periods of active debate, listen to opposing arguments to discern the cultural norms, social values, and moral perspectives relevant to the audience, and craft messages that incorporate and reflect these important underlying priorities. Use opposing views as important data points to understand where empathy and reflection of values are important in producing a message that resonates with the target audience.

4. Deliver these messages early and frequently in order to compete effectively with opposing message frames. Late messaging occurring after the period of active debate is not as effective as messaging that is applied when audiences are paying attention to the issue.

Train agency spokespersons to recognize variables known by risk communicators to provoke public outrage including perceived unfairness, moral indifference, and impacts on vulnerable populations. When these elements are present in a situation, recognize that they are central to public health objectives rather than dismiss them as mere misperceptions.84 Instead, openly acknowledge these concerns and use values-based language with supporting evidence to diminish impassioned critiques, direct or indirect, of agency policies and actions.

CONTENT Specify who is issuing the warning, invoking a chorus of credible sources. Describe exactly what action people should take and explain why. Note the timeframe for when to engage in the behavior. Single out who should take action and explain why. Outline the consequences of taking the action. Indicate if the recommendations have changed or may change in the future. Channel concerns about potential risk to productive behaviors. Aim for clarity, by using simply worded messages and avoiding technical jargon. Be as concrete as possible and use familiar landmarks when telling people what to do. Project confidence and certainty, while preparing people for dynamic conditions. Employ accurate information; avoid any misunderstanding. Maintain consistency; avoid "mixed messages." Explain when advice differs or evolves.

Further recommendations include building trust and credibility outside of crisis time, tailoring messages for specific populations, use trusted communication sources (local healthcare providers), ensure special focus for minority populations.

Credibility: High

Turner, M. M., et al. (2016). "Ebola risk communication project in Liberia: Lessons in crisis communication." from http://healthcommcapacity.org/wp-content/uploads/2016/09/GW-Report-Ebola-Risk-Communication-Project-LIberia_Lessons-in-Crisis-Communication1.pdf.

Recommendations:

2) Express compassion, concern, empathy - from all levels of leadership and in messages; train responders in this

4) Listen to and understand the concerns of the public - media should specifically invite public response and feedback; engage them in the dialog process

5) Communicate honesty, candor, openness - when citing expertise, also need to indicate trustworthiness; train media about how to convey trustworthiness

6) Accept uncertainty and ambiguity - communicate about this, rather than certainty with no room for nuance

7) Regard crisis communication as an on-going process & communicate this

8) Collaborate & coordinate with credible sources

9) Communicate self-efficacy and response-efficacy - helping people know what actions to take, believe that they are capable of taking those actions, and that those actions will have a positive effect

Credibility: High

United States Department of Homeland Security (2016). "National preparedness report 2016." Retrieved 7 Dec 2016, 2016, from https://www.fema.gov/national-preparedness-report.

Note: Although not phrased in terms of outbreaks, but in those of natural disasters, this document does mention the need to target risk awareness messages to specific communities (living in areas vulnerable to flood, dams breaking, etc.) and to link these messages to specific incidents.

Credibility: Moderate

United States Environmental Protection Agency (EPA) (2015). "Community Engagement and Case Analysis Methods for Developing Post-Incident Risk Communication Strategies for Intentional Biological Environmental Contamination Incidents--Final Report." Retrieved EPA/600/R-15/126, from https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=528739.

Strategies:

1. Both spokespersons and the media should distinguish clearly the differences between the current situation and other situations with which community members might be

familiar.

2. Spokespersons should be clear not only that the prescribed steps can be easily performed by target audiences, but also that these steps will have the desired effect in reducing risk. Thus, messages should address both self-efficacy and response-efficacy.

3. Organizational spokespersons should be trained to better segment audiences for optimal message crafting and channel selection, as well as to identify credible sources for communicating with these audience segments.

Credibility: High

Wilkinson, S. (2016). "Using media and communication to respond to public health emergencies: lessons learned from Ebola." from http://downloads.bbc.co.uk/mediaaction/pdf/practicebriefings/ebola-lessons-learned.pdf.

Evidence-based messages (avoid contact with bodily fluids of infected & dead) were not distinguished from uncertain messages (eating bush meat). Lack of message coordination.

What worked was a consortium (SMAC) of actors working through local religious and community leaders, social mobilizers and local radio. The consortium ensured coordination not only of interventions, but also of messages. Also of import - creating messages to address people's concerns vs. strictly epidemiologically-oriented messages. Local, trusted voices, people locals relate to vs. distant experts. Radio drama.

Positive, constructive messages - treatment & survival possible, what they can do to limit disease spread vs. negative - incurable, untreatable, highly contagious. Encourage self-efficacy or no behavior change.

Credibility: High

World Health Organization (ND). "Report of the Ebola Interim Assessment Panel." Retrieved 6 Dec 2016, 2016, from http://www.who.int/csr/resources/publications/ebola/report-by-panel.pdf.

NOTE: No date listed on document. 2015 assumed & listed in greylit.org

The Panel is surprised and dismayed by serious gaps in the early months of the outbreak in terms of engaging with the local communities; some of these gaps still exist in the late phase of the outbreak, which shows that messaging needs to be continuously refined so as to be responsive to the changing epidemiological situation. Traditional cultural practices, including funeral and burial customs, contributed to virus transmission, yet culturally sensitive messages and community engagement were not prioritized. Essentially, bleak public messaging emphasized that no treatment was available; this reduced communities' willingness to engage. Medical anthropologists and other social scientists should have been better utilized to develop appropriate messaging. Because many communities were in a post-conflict situation, they had high levels of distrust in authority. Owing in part to a lack of involvement on the part of the broader humanitarian systems, the resources of nongovernmental organizations, such as community development workers and volunteers, many from the countries and communities themselves, were not mobilized in the early stages. Given WHO's extensive experience with outbreaks, health promotion and social mobilization, it is surprising that it took until August or September 2014 to recognize that Ebola transmission would be brought under control only when surveillance, community mobilization and the delivery of appropriate health care to affected communities were all put in place simultaneously.

Credibility: Moderate

World Vision (2016). "Emergency ZIKV: Results of the consultation process Knowledge, Attitudes and Practices (KAP) on ZIKV Country Report: Guatemala." from http://www.wvi.org/sites/default/files/ZIKA%20Report%20Guatemala.pdf.

NOTE: Document presents Zika KAP study findings. Of note is the lack of awareness of sexual transmission.

Credibility: Moderate

World Vision (2016). "EMERGENCY ZIKV: RESULTS OF THE CONSULTATION PROCESS KNOWLEDGE, ATTITUDES AND PRACTICES (KAP) ON ZIKV COUNTRY REPORT: EL SALVADOR ". from http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&Itemid=270&gid=37053⟨=en.

NOTE: Document presents Zika KAP study findings for El Salvador. Of note is the lack of awareness of sexual transmission of Zika.

Credibility: Moderate

World Vision (ND). Preliminary Zika KAP survey results - Honduras, World Vision.

NOTE: Document presents Zika KAP study findings. Of note is lack of awareness of sexual transmission and the link to microcephaly.

Credibility: Moderate

Appendix 5 Community engagement methods summary

	Community conducts own outbreak analysis	Community creates own interventions	Use visual aids, role plays, & story-telling	Engage local leadership and key people*	Engage local groups*	Decisions made at local level	On-going monitoring & evaluation (feedback)	Tailor interventions to fit population, gender, & circumstances, language	Start communication early	Use local media	Use anthropological assessments	Listening & 2-way communication	Use locals as mobilisers
Number of documents	3	15	6	31	15	3	11	26	8	12	10	15	16
Anoko (44)				■	■			■			■	■	■
ACAPS Liberia (5)			■	■				■		■	■	■	■
ACAPS Sierra Leone (43)	■	■		■			■	■		■			
Accelerating (30)		■											
Battling for zero (78)				■					■				
Bolstering Public Health (6)				■	■								
Community led Ebola mmt (63)	■	■	■	■	■	■	■	■					
Ebola barriers (49)				■				■					
Ebola Impact (88)				■				■					
Ebola Interim (66)				■			■	■			■		
Ebola Interim Secretariat (56)								■			■		
Ebola Lessons Reader (7)				■									
Ebola Outbreak (35)		■		■						■			■
Elements of culture (45)								■					
Gautier Analysis (73)				■	■								
Gautier Preparing (74)			■	■				■					■
Global Communities (69)				■	■		■	■				■	■
Guidance note for OCV (24)				■									
Hiemstra Ebola Response (89)													■
Hird Lessons (90)				■	■	■							
Hot Spot Busters (65)				■					■				■
IDS Africa APPG (60)		■							■			■	
IFRC Beyond Ebola (91)												■	
IRC Montserrado (53)		■										■	■
Making a difference (54)											■		
Modarres (20)				■	■		■	■					■
MOH Liberia (71)								■					
MSF Research (48)		■						■			■		
Now is the time (64)													■
OCB Ebola review: Part 1 (61)		■		■			■	■	■		■		
OCB Ebola review: summary (92)								■	■	■			
One Year Into (72)								■		■			
Oosterhoff (70)				■	■								■
Oosterhoff (68)		■		■								■	
Oxfam Ebola is still here (79)												■	
Oxfam Prioritising (28)	■	■		■	■	■	■	■		■		■	■
Peremans (17)								■	■	■			
Quinn (12)		■	■										■
Schoch-Spana (18)							■	■				■	■
Social Mobilizers (84)				■	■			■					■
Still Surviving (93)		■		■				■					
Sugg (2)				■	■			■		■		■	
Sustersic (82)		■		■	■					■		■	
Taking Stock (11)				■	■			■		■	■		
Turner (21)							■					■	
UK House of Commons (94)				■	■				■		■		
UNGA (3)							■				■	■	
University of Minnesota (77)		■		■				■	■				
USEPA (52)							■	■					
Wilkinson (36)		■	■	■						■		■	■
Y Care (41)			■	■	■					■			

*See additional table below for specific leaders and groups to engage.

Appendix 6 - People & groups to engage

	Religious leaders	Traditional leaders, chiefs, elders	Traditional healers	Other local authorities or leaders	Survivors	Health Workers	Women & Women's groups	Youth groups	Others (hunters, taxis, market groups, hospitality industry
Number of documents	18	16	7	11	4	10	11	9	5
ACAPS Liberia (5)	■								
ACAPS Sierra Leone (43)	■								
Anoko (44)	■	■	■	■		■	■	■	■
Battling for zero (78)	■	■		■		■	■	■	
CE Workshop (55)	■	■	■	■		■	■	■	■
Community led Ebola management (63)		■		■					
Ebola barriers (49)					■				
Ebola Impact (88)	■			■		■	■		
Ebola Interim (66)							■		
Ebola Outbreak (35)	■	■							■
Ebola Strategic Response Plan (58)	■	■		■	■		■	■	
Gautier Analysis (73)	■		■	■		■	■	■	
Gautier Preparing (74)	■		■	■		■	■	■	
Hot Spot Busters (65)		■							
Modarres (20)	■		■	■	■				
OCB Ebola review: Part 1 (61)					■				
Oosterhoff (68)		■		■					
Oxfam Prioritising (28)	■	■	■			■	■	■	
Quinn (12)		■							
Schoch-Spana (18)									
Still Surviving (93)	■	■				■			
Taking Stock (11)	■			■					■
UK House of Commons (94)	■	■							
UNGA (3)	■	■				■	■	■	
University of Minnesota (77)	■	■				■	■		
Wilkinson (36)	■	■							
Y Care (41)		■	■				■	■	■

Appendix 7 – Works Cited

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