Community-Based Pandemic Preparedness

Multi-sectorial actions for safer, healthier and more resilient communities

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A Story from Uganda:

A sassy young man wanted to show that he was more clever than a wise old man from his village. So, he caught a butterfly, held it between his hands, and took it to the old man. ‘Please, father, tell me, is this butterfly dead or alive?’ The young man thought, ‘whatever he says, I can trick him. If he says the butterfly is alive, I will crush it and the butterfly will die. If he says the butterfly is dead, I will let it go and the old man will not be as clever as I am.’ The old man looked thoughtfully at the younger man and said, ‘I don’t know whether this butterfly is dead or alive. But what I know is that the fate of the butterfly is in your hands.’

We cannot look to anyone else to tell us what will happen if pandemic influenza comes. We don’t know how bad it will be, how long it will last, or how many people will become sick or die. But we do know one thing with certainty. The fate of our communities is in our own hands.

(Taken from: Actions Local Leaders Can Take to Fight Pandemic Influenza, Humanitarian Pandemic Preparedness (H2P), www.pandemicpreparedness.org)
Summary:

Within the last decade, there has been growing recognition that community participation is fundamental to disaster risk reduction. National pandemic preparedness plans that have advocated for and support and embrace community based approaches are proving to be more resilient and adaptable. Since 2005, much has been done at the community level to strengthen surveillance and response systems, clearly demonstrating the links between international protocols, local realities and sustainability. While the key findings of this report are highlighted in the document that follows, it is evident that the wealth of experiences and approaches that have been taken during the past decade still requires further investigation.

Key findings include:

- National strategies and policies are not enough to prepare for disasters and emergencies, such as a pandemic, but require community participation and consultation, linkages with partners at all levels and operational planning not just at the national level but at and with the community.
- Communication materials need to be prepared and tested in the local environment to ensure their acceptance and understanding prior to, an emergency or disaster
- Interventions that target community and households to enhance early detection, early warning and reduce the spread of communicable diseases, such as pandemic influenza, can be harmonised across vertical disease preparedness and response programs, contributing to preventing and mitigating against emergencies caused by epidemic/pandemic prone diseases
- In order for community based programmes to be sustained long term mechanisms need to be established to ensure commitment at all levels and resources will continue to be available after initial funding has ceased.
- Lessons learnt and examples of good practices from community based programmes need to be synthesised into a strategic framework for ongoing sustainability.
- Programmes that have shown to be the most effective and most sustainable have included partnership participation, empowerment, and ownership of the local communities, all of which are factors that underpin sustainability.
I. Introduction

Most experts agree that countries with resilient, community-based systems will be best able to respond to the shocks caused by global events, such as food crises, climate change, and pandemic diseases (World Health Organisation, 2008). Adequate community preparation strengthens the ability of households and communities to prevent, prepare for, mitigate, respond and recover from emergencies and disasters. Applying the principles of emergency and disaster risk management at the community level, can improve the safety and resilience of communities by:

- reducing underlying vulnerability and increasing access to primary health care (PHC),
- preventing emergencies from disease outbreaks,
- preparing families, communities and local level health systems for emergencies through community-based risk assessments and early warning, risk awareness and education of communities and health workers, and preparing local level health systems to ensure access to essential services
- respond and recover from emergencies at the local level.

(World Health Organisation, 2010)

This paper will outline some accomplishments over the last 5 years for preparing communities for a pandemic including production of tools and guidance, national and district level planning and community-based actions. The paper will show how practical mechanisms, instruments and communication tools have been utilised to strengthen and enhance community resilience.

Community focused, driven, owned, accepted and sustained.

II. The National Context

National pandemic preparedness

Since WHO guidance to national governments on the development of National Pandemic Plans was first issued in 1999, many governments have faced the challenge of how they would prepare their communities for the next influenza pandemic. From 2005 onwards, extensive practical experience has been gained from the pandemic preparedness process and avian influenza outbreak responses in many countries. Over the past 5 years, as planning and response mechanisms have matured, there has been the recognition that the effects of a pandemic will require a response well beyond just the human and animal health sectors. This has lead to the adoption of a whole of government and more recently, a whole of society, planning approach. All of these actions combined with the release in 2005 of the International Health Regulations have provided further impetus for the international community to recognise and address global disease threats at all levels of government.

The early national pandemic planning concentrated on animal health matters and the provision of emergency medical supplies. As governments have developed and revised
their national plans it has become clear there has been a paradigm shift from solely medical and pharmaceutical management of clinical influenza that affects individuals during a pandemic to an approach that includes communications, public education, social distancing, isolation and quarantine and other forms of social distancing. Implementing national strategies at the local level however can be challenging. For example, national/sub-national authorities may anticipate the need to close schools; however the triggers for school closure need to be adopted by local authorities to inform decision-making at the local level (Klaiman T, 2011). What the thresholds for these triggers will be will vary according to the different local contexts (urban, rural or frontier communities, for example). Since emergencies are primarily experienced at the local level, strategies aimed at limiting and reducing the risk of exposure to the population, need to be refined so that they are operational and achievable, reflecting the local situation and giving real consideration to resource constraints (Ortu, 2008). A sensible approach is to combine top-down and bottom-up approaches to support and enhance local capacities.

“Strengthened capacity to respond to human cases of avian influenza and the corresponding pandemic threat will strengthen the capacity to respond to many other emerging and epidemic prone infectious diseases, and thus increase global public-health security against the threat of infectious diseases.” - Fifty-Ninth World Health Assembly

Community-Based Disaster Risk Management (CBDRM)

Ensuring that disaster risk reduction or management is not just a national priority, but a local priority with community participation is critical to the success of national disaster risk reduction programs. A disaster is defined as a serious disruption of the functioning of a community or a society causing widespread human, material, economic, or environmental losses that exceed the ability of the affected community or society to cope using its own resources (The World Bank, 2009). More simplistically, if we define a disaster as being when hazard meets vulnerability then communities that have insufficient capacity or measures to mitigate the risks would be on the frontline. The effects of a disaster are first experienced at the community level and the community is the first to respond to a disaster. Over the last two decades it has become apparent that using only top-down approaches to disaster risk management fails to address the specific local needs of vulnerable communities. Disaster Management means a planned and systematic approach towards understanding and solving problems in the wake of disasters. It involves the systematic observation and analysis of measures relating to disaster prevention and risk reduction, emergency response, recovery and development. Therefore disaster management is a function of community preparedness.

A key aspect of a successful project is the partnership participation, empowerment, and ownership of the local communities, all of which are factors that underpin sustainability.

Partnerships: The Community-Based Management of AHI in Asia

The project on 'Strengthening Community-Based Approaches to Management of Avian and Human Influenza (AHI) in Asia' was initiated by the AHI-NGO-RC/RC-Asia Partnership – comprising Asian Disaster Preparedness Centre (ADPC), CARE, the International Federation of Red Cross and Red Crescent Societies (IFRC) and the International Rescue Committee (IRC). It was supported by funding from the Canadian government through the Asian Development Bank (ADB).
The project seeks to strengthen partnerships between communities, NGOs, governments, UN organisations, the private sector and academic institutions in their efforts to manage AHI in communities in Asia. Information on this project can be found at [http://www.adpc.net/communityAHI-Asia/](http://www.adpc.net/communityAHI-Asia/).

To facilitate the exchange of experiences and to build networks amongst community-based AHI practitioners in the region, the partnership arranged two national and two inter-national study tours. Representatives from different community contexts, countries and organizations observe, discuss and learn from the implementation of community-based AHI programmes in other vulnerable communities and countries. Findings and learning from the study tour of Cambodia:

**Bio-security and sustainable livelihoods - cross-border study tour, 23-25 June 2008, hosted by CelAgrid and supported by Cambodian Red Cross and IFRC**

CelAgrid Cambodia and Cambodia Red Cross (CRC) hosted the three-day study tour that focused on CelAgrid’s project on, ‘community-based good practice in chicken-raising and AI awareness in three provinces of Cambodia’. The study tour brought together participants from NGOs and Red Cross organisations working in Cambodia, Lao PDR, Thailand and Vietnam. Participants visited CelAgrid’s rural development projects and learned about different aspects of bio-security for community-based management of AHI. Discussions between hosts, participants and project beneficiaries led to sharing of experiences and identification of lessons for community-based management of AHI, for example: Community participation is key to the success of projects aiming to strengthen community-based management of AHI in Asia.

Projects should be designed to meet the needs and priorities of their beneficiaries, who should be involved in the initial participatory planning processes. Thus, CelAgrid took into account the importance, from the perspective of the communities they were working with, of considering bio-security and avian influenza risk reduction within the wider context of protecting and improving community livelihoods. Additionally, it is important to look at the costs and benefits for community members of implementing different risk reduction techniques. Local, low-cost resources can be used to overcome barriers to behaviour change. One of the main barriers to fencing chickens in Cambodian communities is the additional cost and time required to feed poultry that can no longer scavenge for food. To overcome this barrier, CelAgrid has involved communities in the production of low-cost, high-protein chicken feed.

Today, the importance of strengthening local capacities and moving away from top-down approaches to risk management is generally recognized. But approaches to community-based management of AHI are still too often limited by top-down structural constraints such as unrealistic government policies, limited capacity of veterinary or public health services, poor compensation policies, etc. By raising awareness of common challenges and highlighting the value of different countries and organisations working together to strengthen community-based management of AHI in Asia, the AHI-NGO-RC/RC-Asia Partnership hopes to challenge and overcome some of these difficulties.

Taken from the report written of Anne Decobert, the Project Coordinator with the Public Health in Emergencies (PHE) team at ADPC, (Asian Disaster Preparedness Center, 2008)

There are and have been many Community-Based Disaster Risk Management (CBDRM) initiatives in different parts of the world; many of which have produced very tangible results. In reading these project reports it would seem that a true sense of community ownership, working partnerships and sustainability are inextricably linked.

**III. Risk Assessment and Early Warning**

Community-based early warning and surveillance contributes to early detection, and the prevention and control of the spread disease/hazard. It can also be used to contribute to risk assessments, particularly integrating biologic hazards such as epidemics and pandemics into national all-hazard and risk assessments. Since the Asian Disaster Preparedness Centre’s involvement in the Community-Based Management of AHI in Asia program, Pandemic
influenza has been integrated into their all-hazards assessment potentially increasing the visibility of biological hazards into risk assessments and therefore into emergency planning as a whole.

There are a variety of different models for community-based surveillance and early warning, however most models share the following common objectives: to improve the sensitivity of the existing formal surveillance system, to move towards an active system of detection and reporting, and to link local mobilisation for case detection, early warning and response to the formal surveillance system. Surveillance, diagnosis and response are critical at the community level in order to limit the transmission of diseases with pandemic potential, yet without an active local surveillance and response mechanism the opportunity to respond to new and re-emerging infectious diseases could be lost. Examples of community-based surveillance systems in Asia clearly demonstrate the links between international protocols, local realities and to sustainability.

CASE STUDY - CARE
CARE has been implementing programs for Avian and Pandemic influenza since 2005 in 9 countries. One of the core elements of these programs was to improve national disease surveillance and community-based surveillance (CBS) for avian influenza and other diseases of public health importance. The CBS model established an active volunteer network within every community, in order to fill the gap between community/households and the lowest level reached by the current national passive surveillance system. The volunteers, who are themselves part of the target communities, act as the eyes and ears of the community-based surveillance system; they also assist village and animal health workers, who are themselves linked to the commune and district levels of the system. This model encourages established surveillance systems to shift from passive to ongoing, community-level participatory and active surveillance. The model has also contributed to increased multi-sectoral coordination in the reporting and response to disease outbreaks at the community level. In addition, the model highlighted the value of interpersonal communication as a way to move from raised awareness to behaviour change.

CARE Vietnam
Care Vietnam has been mobilizing communities to take action against the threat of avian influenza at the village level. By strengthening collaboration across sectors and all levels of government, the time between detection and response can be reduced, ensuring a more comprehensive and effective effort in reducing transmission. Community-based surveillance (CBS) networks cover a wider population with greater intensity than centralized health authorities due to their size and the relationships volunteers have with their communities.

Since 2007, CARE Vietnam in collaboration with the US Centers for Disease Control and Prevention has shown that by training local volunteers to routinely look for AI among poultry and humans and preparing them to take charge in the initial response, communities can more efficiently identify cases and quickly respond to prevent transmission. The Training and Response for AI Now (TRAIN) project has transformed what was once a passive surveillance system into an active one, closing the gaps between commune-level authorities and households. This program revolves around a training-of-trainers workshop using a CBS model. There were four main components:

1. Capacity-building through training of the various target groups that play different roles in the CBS network – including the community AI committee, village health workers and animal health workers, and village volunteers. Each training session was tailored to suit the functions and needs of the specific groups. For example, volunteers were trained to identify signs of AI infection in village poultry and to notify trained health workers and community leaders of suspected cases.
2. Establishment of a volunteer network at the village level that identifies the roles and responsibilities of all people involved in the CBS network.
3. Comprehensive monitoring and support of the volunteer network to build capacity for early detection of AI infections outbreak situations included: weekly house-to-house visits including the distribution of IEC materials, discussions and observing compliance of behaviours; monthly face-to-face volunteer team meetings during which volunteers submitted reports, shared lessons, and received updated information and technical support; and team leader meetings to consolidate reports, share lessons and information, and disseminate new guidelines.

4. Simulation exercises to assess the preparedness of community AI committees to detect, report and respond to suspected cases of AI infection in both poultry and humans. (Asia Disaster Preparedness Centre, 2009)

Although highly effective this project did raise key questions regarding replication:
- Volunteers were mainly recruited from the Women’s Union and Youth Union - a wider recruitment process is required as it was difficult for young and female volunteers to be taken seriously by older, male farmers.
- Weekly visits of 40 households were difficult to maintain - therefore, the number of houses to be visited by each volunteer could be varied according to the seasonal risk of outbreaks, with more frequent visits to more houses made during peak seasons.
- In order to keep the network active, monthly or quarterly refresher trainings and meetings need to be maintained.

An example of sustainability CBS: In 1998 a similar programme based on CBS was implemented to control dengue, almost 10 years later, in 2007, over 59% of households were still receiving visits even though funding had stopped in 2001.

From this experience CARE concludes that "the principles of community-based surveillance can be successfully applied in any community around the world to increase the ownership and capacity of communities to detect and respond to disease outbreaks."


IV. Education and awareness

A variety of community assessment initiatives for animal and human influenza (AHI) have been undertaken in order to identify existing beliefs, attitudes and behaviours as well as to uncover gaps in information and barriers to risk-reducing practices (Asian Disaster Preparedness Center, 2008).

One important lesson identified from community-level assessments and research is that community perception influences individual behaviour. It is recognized that an individuals' behaviour is formed in the context of their community and society. Therefore planned interventions must include efforts to change the norms of community excepted behaviours. From this perspective, communication has a role to play in influencing community and societal change in areas such as building a community agenda of important public health issues, “lobbying for community change”, changing public health policy, allocating resources to make behaviour change easier, and legitimizing new norms of health behaviour, especially those requiring societal adoption, such as social distancing, in order to be effective (Breslow, 2002). Discrepancies between levels of awareness and actual changes in behaviour often relate to the degree to which the local population truly perceive their own risk rather than awareness of risks and risk reducing behaviours in a more general sense, (see Section V). Therefore it is important to identify and gain the acceptance and buy-in of the true change-makers in a community early in the planning process. In summary, in order to strengthen prevention and control of AHI, wider societal/community level agreement and commitment to the change are required in order to facilitate their successful adoption at the individual level (Marshall H et al., 2009). The example below is just one that highlights the importance of partnerships, advocacy, empowerment, ownership and the building of relationships.

Women Spark Behavior Change: Collaborating with the Vietnam Women’s Union
Over two years after their work began in Vietnam, the AIBCC (Behaviour Change and Communication) Project’s collaboration with the Vietnam Women’s Union (VWU) has been cited by many as a success in mobilizing communities to take action in preventing and controlling avian influenza. In 2006, few avian flu interventions were directed at rural women, even though they comprise a large portion of backyard poultry farmers in Vietnam. With over 13 million women members in all 64 provinces of the country, the VWU seemed to be a logical conduit through which to reach these backyard poultry farmers to promote AI prevention activities.

The AI-BCC trained VWU members on the national and provincial levels on participatory training methods for AI communication. These trained trainers, in turn, conducted workshops for district- and commune-level staff on how to get the word out on AI prevention behaviours through group discussions, club meetings and individual techniques. By September 2007, 3,833 district and commune women were trained in 24 provinces deemed at high risk for AI outbreaks, and these trained women were able to promote AI prevention practices regarding poultry to more than 88,000 women farmers through group discussions and club meetings. A follow-up study conducted by AC Nielsen for AED confirmed that nearly all of these trained women continue to communicate AI messages, albeit informally, up to the present. This project officially closed on the 31st of December 2009.

The AI-BCC Project continued to collaborate with the VWU to train women leaders on AI communication and to provide support to AI communication activities in communes. Applying lessons from the previous year, trainings have included more time to hone the women’s skills in facilitating group discussions and club meetings, and more support has been provided for village theatre showings.

Nurturing a Social Network to Respond to Avian Influenza Outbreaks: AI-BCC and the Lao Women’s Union

Similar to the project described above this project also embarked on a participatory action research activity, tapping into the LWU’s reach into sometimes-far-flung communities to facilitate the information collection and collaboration. The study intended to gauge the feasibility of changing behaviours related to bio-security based on the concept that village poultry are bound together in risk as “one village = one poultry flock.” The participatory process provided a win-win scenario: it offered insight into villagers’ interests and concerns about their lives, and it also served to create community communications activities that were realistic and achievable for the target audience.

“We were very quick and effective,” noted Mme. Phewlavanh Luangvanna, Training Director of the Lao Women’s Union. “That's what we are acknowledging here with this walk. We have worked hard to get to this point,” she explained, “and I feel good about what we did for our communities -- we educated over 40,000 women in the villages on prevention measures... and not just the women, but their families as well.” Nurturing a Social Network to Respond to Avian Influenza Outbreaks: AI-BCC and the Lao Women’s Union (PDF).

Projects such as the two described above have been established to preposition information about a known hazard at the local level prior to a disease outbreak in order to enable a more immediate and effective response. Another particular example of such a package is the CREATE project (UNICEF). It was developed to ensure that appropriate, effective and professional emergency communication tools were ready to be adapted, produced and delivered quickly for a variety of setting and situations. The creative materials, available on line, are to be reorganised including a separate section that will bring together resources for general multi-hazard preparedness.
The H2P Communication and Advocacy tools (to also be discussed below) were created education and awareness at the household and community levels.

**H2P Communication and Advocacy tools**

Knowing what to say and how to say it are critical in a successful pandemic and humanitarian response. The H2P Initiative has designed low-literacy Communication tools to be used in interpersonal communication at the district- and community-levels. These materials serve as guides to be adapted to specific regional or country situations. An Advocacy package on pandemic and humanitarian facts and information is also available to be used by media, national stakeholders in the public and private sectors.

Building on its field experience and recent response to the H1N1 Influenza, the H2P Initiative has developed and adapted a variety of communication materials to be used when planning for and responding to a local outbreak, or pandemic scenario, including:

- Five Useful Things to Know about the 2009 H1N1 Outbreak
- How Serious is the Current Pandemic Risk?
- How is Pandemic Influenza Different?
- What Can We Learn from Previous Pandemics?
- What Interventions are Available?
- Influenza Counselling Cards for Health Workers and Volunteers

Languages and cultures are represented from Latin America to the Caribbean to Middle East to Africa and Southeast and South Asia. The Communication and Advocacy tools can be found at [http://www.pandemicpreparedness.org/categories/details.aspx?section_id=2](http://www.pandemicpreparedness.org/categories/details.aspx?section_id=2)

**V. Reducing risk**

To reduce the spread of influenza viruses that have pandemic potential, individuals, households and communities need to be provided with the information and resources necessary to decrease the likelihood of transmitting influenza from animals to humans. Then in the event that a pandemic emerges and spreads easily from human to human, information that households and communities can use to its mitigate impact through early warning and detection of disease and interventions such as hand washing, respiratory etiquette, avoiding contact with infected persons and staying home when ill need to be made available in formats that are culturally acceptable and adapted to local needs. For these actions to be successfully implemented active engagement with the community, including marginalized groups, in the development and delivery of public health messaging is required. Further analysis is currently being undertaken to determine if the non-pharmaceutical actions implemented by local health authorities, either individually or in combination, during the early stages of local outbreaks, reduced community transmission or the impact on marginalised or

![Examples of H2P Communication Tools](http://www.unicef.org/influenzaresources/index_639.html)
vulnerable populations during the spread of pandemic influenza A (H1N1) 2009. These analyses should also focus on the implementation of these strategies to determine the degree of acceptance and compliance at the community level, given the local demographic, socio-cultural and geopolitical factors.

Many of the prevention and mitigation behaviours for pandemic influenza are similar in nature to those used to prevent and mitigate other epidemics or unknown biologic threats, for example hand washing and safe food preparation. Adapting new messages to previously known risks in a population can improve their overall adoption. Furthermore, in the aftermath of emergencies/disasters similar behaviours can reduce the spread of communicable diseases in vulnerable populations exposed to overcrowding, lack of safe water and sanitation, breakdown in vector control programs, lack of proper nutrition and access to health and essential services.

In 2007, several agencies came together to develop and implement ways of reducing the risk of excess mortality from an influenza pandemic by focusing on humanitarian coordination and community-level preparedness. It was called the Humanitarian Pandemic Preparedness Project (H2P). The International Federation of Red Cross and Red Crescent Societies (IFRC) was the overall coordinating agency and also provided technical and financial support to its national Red Cross and Red Crescent Societies to help them develop and implement pandemic preparedness activities. The CORE Group, InterAction, and AI.COMM (managed then by AED, now known as fhi 360) represented the NGO sector for the H2P partnership-engaging NGOs at the global and country level in materials development, communications, capacity-building, and coordination around pandemic preparedness and response. The three principal objectives of H2P were:

1. To support the development of influenza pandemic preparedness plans, protocols, materials and tools for communities in the areas of health, food security and livelihoods in designated countries.
2. To strengthen the in-country capacities of staff and volunteers of significant humanitarian and civil society organizations to carry out influenza pandemic preparedness plans and protocols.
3. To ensure functional coordination between global, national, district and community level stakeholders, including the UN system, in the preparedness and response of the humanitarian section.

In Uganda, The H2P project, implemented jointly by the Uganda Red Cross and CARE, has increased the capacity of communities to respond to many different diseases beyond pandemic influenza. The simple hygienic practices emphasized in the program are the very practices that can be used to control the spread of diarrheal diseases, hepatitis A, and many other communicable diseases. The pictorial approach to many of these tools made it possible for them to be used despite potential language/dialect barriers and literacy levels.

**Limiting spread of disease: examples of community-based interventions**
Interventions that target community and households to enhance early detection and reduce the spread of communicable diseases, such as pandemic influenza, can be harmonized across vertical disease preparedness and response programs.

**CARE’s Knowledge Attitude and Practice (KAP) survey results for Lao: ‘Improving Local Capacity to Reduce the Risk of Avian Influenza’**
From 2006, CARE’s Lao People’s Democratic Republic (PDR) office has undertaken a variety of communication-focused actions in an effort to prevent the spread of avian influenza (AI) - and to respond to emergency outbreaks of bird flu. Core activities included research, capacity building, awareness-raising in local communities on topics such as hygiene practices, and community-level mobilisation. KAP surveys were conducted before and after the interventions to measure the changes in the participant’s knowledge, attitudes and practices. Results can be seen in the table.
Results can be seen in the table.
The activities undertaken in CARE’s AI Programme were largely inter-personal and included:

1. **Training:** this primarily involved the sharing of information through face-to-face exchanges.
   - module-based training covering animal and public health with a specific focus on the involvement of women in avian flu awareness-raising and prevention;
   - capacity-building sessions for village-level volunteer veterinary workers and health workers (women’s union members are following up by disseminating information at the grassroots level), which focus on AI transmission and prevention in poultry and humans, basic surveillance and reporting, and how to run community-level awareness-raising events;
   - participatory training of trainers (TOT) sessions on AI and communication skills for district-level staff, as part of an effort to enable them to share information about AI topics such as sources of infection, prevention techniques, biosafety, and human health implications; and
   - market-place training and awareness-raising activities for poultry traders in an effort to improve poultry handling practices and market biosafety.

2. Community-level activities, which frequently draw on the "edutainment" strategy to engage audiences of all ages.
   - meetings which are designed to equip the community with the knowledge and skills to take adequate precautions in both human hygiene and farming practices;
   - community-level evening events involving communication of AI information, question-and-answer (Q&A) sessions about AI, AI games, and AI songs;
   - demonstration of safe poultry preparation and cooking at local festivals; and
   - distribution of information, education, and communication (IEC) packs containing street banners, posters illustrating risk behaviours, video compact discs (VCDs) of AI television public service announcements and a documentary, CDs of radio spots, and AI folksongs and household booklets. The posters and booklets were designed by the United Nations Children’s Fund (UNICEF) and the Academy for Educational Development (AED) and given to the audiences in an effort to help them gain a deeper understanding of what they learned during the participatory activities.

Similar programmes conducted by CARE and project partners have demonstrated similar results, (CARE, CBS Case Study in 5 Countries, 2008). This report concluded that CBS had great potential to improve the ability to detect and respond to emerging infectious diseases and improve global public health security. Furthermore the principles of CBS can be applied in communities to increase local ownership and capacity of communities to detect and respond to disease outbreaks. [http://www.comminit.com/?q=natural-resource/node/134785](http://www.comminit.com/?q=natural-resource/node/134785)

Partners included: Department of Agriculture and Forestry, Department of Health, Lao Women's Union. Advisory services provided by the National Technical Coordination Office against and Control of Avian-Human Influenza (NAHICO).

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<th>Measure</th>
<th>Before Intervention</th>
<th>After Intervention</th>
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<tr>
<td>Awareness of avian influenza (AI)</td>
<td>64%</td>
<td>98%</td>
</tr>
<tr>
<td>Able to describe any method of poultry to human transmission</td>
<td>36%</td>
<td>97%</td>
</tr>
<tr>
<td>Household implementation of at least 3 AI preventative practices</td>
<td>8%</td>
<td>69%</td>
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Behaviour change communications and training can also reduce the spread of other common diseases if they are widely accepted and adopted by society. Below is an example of the possible collateral benefits of a hand washing campaign that was conducted in Bolivia.
If any good has come of the global H1N1 flu pandemic, it may have started with a child like Nayeli Quispe, 7, a second-grader from the impoverished hillsides of La Paz, Bolivia. Prompted by a massive campaign by the country's public-health officials to contain the spread of the new flu virus, Nayeli and millions of other Bolivian schoolchildren have been washing their hands a lot more than usual — after recess, before meals and every time the animated dancing hands pop up in public-service announcements on TV. "First you wet them really well, then you rub the soap all around and then you dry them with a clean towel," says Nayeli.

Public-health experts now say the increase in hand-washing across the country may have had some collateral benefits, not only in helping to reduce H1N1 infections, but also the spread of other common diseases in Bolivia. "We see a steady 10% to 15% drop in the rate of incidence of acute diarrheal diseases in all age groups, compared with last year's numbers at this time," says Dr. René Lenis, Bolivia's director of epidemiology, referring to data collected on the number of weekly cases of diarrheal disease reported in medical centers nationwide in 2008 and 2009. Although the new statistics, and the apparent link between hand-washing practices and disease reduction, need further investigation, "this certainly raises our attention," says Lenis. Diarrheal diseases are the biggest killer of children under age 5 worldwide; in Bolivia, 30,000 children die each year from such illnesses. Swine flu, as H1N1 is still referred to there, has hit Bolivia hard as well, with more than 2,000 infections and 55 deaths in a country of 9 million, most having occurred during the southern hemisphere's winter (June through August).

Starting in April, sudsy cartoon hands were everywhere, promoting hand-washing on billboards, at soccer games, in classrooms and on TV. "[Nayeli] was taught at school, and then would remind us to do it at home," says Claudia Quispe, Nayeli's mom. It's not that she and her family didn't wash their hands before, explains Quispe, an indigenous Aymara shop owner, but they didn't do it as much or as thoroughly as they should have. Within her family, Quispe thinks the public-health campaign has been a success: "Normally both Nayeli and my 3-year-old son have constant stomach aches or diarrhea. But in the last few months, they just haven't had those issues," she says.

That's exactly how the program is supposed to work, says Therese Dooley, a senior adviser for UNICEF's Water, Sanitation and Hygiene (WASH) project. "Kids are the key because they are great at carrying messages," Dooley tells TIME. For years, WASH has been trying to educate people, particularly in developing countries, about the benefits of a simple action like washing hands with soap. Diligent washing, especially at critical times (like after going to the bathroom and before meals, for example), helps reduce the rate of diarrheal disease by more than 40%.....

Lenis and Dooley are still wary of the short-term data on Bolivia's descending rates of diarrheal disease; it remains to be seen whether the trend will hold up. ... She says she has not seen similar data regarding a drop in rates of diarrheal or other diseases on an H1N1 timeline from other countries (though at least one news report suggests that increased hand-washing due to H1N1 has led to a sharp reduction of pinkeye cases in Korea).

The challenge now, in the wake of pandemic influenza A H1N1 2009 is to see if these cross-cutting preventative interventions have produced real effects that are measurable and sustainable in the long term.
VI. Preparedness for response and recovery

Moving from the planning phase to implementation and activation of plans requires political and community commitment. A recent study of health system challenges in six Asian countries highlighted the importance of translating existing plans into operations, particularly at the regional and local levels. Communities and local administration offices need to continue to test and update their plans, in order for these plans to be as effective as possible when they are activated (Hanvoravongchai, et al., 2010).

Communities including front-line workers such as community health workers, and volunteers are often the first to respond to an emergency when it occurs, often before help arrives, playing a vital role in disaster preparedness, response and recovery. When essential systems are overwhelmed, destroyed or disrupted, communities can be left to care for themselves for a number of days. Front-line health workers, volunteers such as those from the Red Cross/Red Crescent Societies, households and communities may need to manage an increasing case load of persons ill from pandemic influenza or other common illnesses due to overwhelmed or disrupted health systems, similar to other emergencies. Multi-sectoral preparedness and a coordinated response at the community level are critical for a rapid and effective response to pandemic or other local emergencies. A supportive environment is needed to build the capacity of communities; to identify and train the front-line workers from all critical sectors; to provide legislation and policy at the national and sub-national levels that supports community based interventions; and to provide the necessary resources and continued support to monitor programs at the community level.

Many of the actions taken to increase local capacity within pandemic preparedness have included multi-sectoral involvement to ensure that essential services will be available in the event of any disaster or emergency, moving from capacity to capability. For example, CARE Vietnam’s evaluation of jointly developed commune and civil society pandemic preparedness and response plans, showed strengthened capacity and capability to conduct situational analyses, activity planning - including responsibilities of government and community - and mobilizing local resources for pandemic and other disasters. In West and East Africa, the Horn of Africa and Egypt the Central Fund for Influenza Action (CFIA) funded projects to train over 10 000 health workers and migrant community leaders in health promotion, social mobilization, AHI awareness, and counselling and communications. One of the most important outcomes of the trainings was the realisation by the participants that the tools and skills they were learning were transferrable to the other crises and to everyday life. Similar CFIA funded projects were also carried out in Lao PDR, Vietnam and Cambodia with similar outcomes. An evaluation of these projects showed that they faced challenges from a lack of support from senior management in the workplace and in providing information to mobile populations, especially in border areas. These findings highlight the need for greater community-based involvement and cross-border cooperation.

### Prevention of influenza-like illnesses among migrant communities

**IOM Case Study**

by: Dr. Anita Alero Davies

The International Organization for Migration (IOM) strengthens the capacity of migrant communities to cope with and respond to crisis caused by influenza like illnesses (ILI) by ensuring that migrants receive culturally and linguistically appropriate information for behaviour change. IOM identified counselling and communication skills as a generic skill that is need by all community health and development workers when conducting social mobilization campaigns with migrant populations. IOM developed a training of trainers manual Introduction to Basic Counselling and Communication Skills: IOM Training Manual on Migrant Community Leaders and Community Workers. This manual was piloted in Egypt in 2008. The manual has been tested and translated into English, French, Spanish Arabic and Russian. The manual has been used in several locations and a total of 103 persons have been trained using this manual. Several outreach activities were conducted with migrants at each project location.

Radio jingles were produced and health promotion material such as posters, handouts, T shirts, hats, school material for children, have been developed in the languages appropriate for the target audience. All IOM trainings and social mobilization campaigns take internal and cross border migration factors into consideration.
Migrant health promotion and pandemic preparedness capacity building activities have been conducted in **Africa**: Egypt, Nigeria, Senegal; **Asia**: Cambodia, Laos, Thailand, Vietnam; **Latin America**: Costa Rica.

In all locations activities were conducted in cross border areas and health promotion material and social mobilizations were in the language of the migrant communities.

For example in Costa Rica the focus was on the Ngobe-Buglé indigenous population who moves across the border between Costa Rica and Panama, and Nicaragua as farm labour migrants. Pandemic preparedness health promotion material has been developed for this migrant community. Indigenous cultural advisors, migrant community leaders and health workers were trained to use this health promotion within the migrant communities.

Few national pandemic preparedness plans include the needs of migrants. IOM collaborates with its member states and advocates for national plans from the community to the national level to promote the health and social needs of migrants. The People's Republic of **Laos** is one of the governments that recognised migrant needs and included migrants into their communication strategy component of the national pandemic preparedness. In **Thailand** IOM in collaboration with the national authorities and other stakeholders conducted a community-based simulation exercise that had a cross border migration component. IOM continues to reinforce community capacity to cope with and respond to crisis caused by ILI, and to promote inclusion of migrant and mobile populations needs in pandemic and disaster management plans.

**Lessons learned**

- Pandemic preparedness community-based activities should be integrated into existing services in the community for both migrants and members of the host community
- Appropriate migrant friendly information and services for pandemic preparedness can only be ensured with active involvement of migrant communities
- It is important that the skills developed at the community level can be used in a wide range of crisis situations, beyond pandemic
- It is important that migrant needs are included in national communication strategies

Finally it would not be possible to discuss the actions taken during the past five years without further highlighting the work of the Humanitarian Pandemic Preparedness (H2P) program. This innovative partnership, coordinated through the IFRC, included U.S.-based Non-governmental Organizations (NGO) and United Nations (UN) agencies. The main goal of the H2P program was to prepare communities to mitigate the impact of an influenza pandemic on excess morbidity and mortality from risks related to health, food security, and livelihood. The IFRC had H2P teams on every continent, as well as tools and material for training and education that had been translated and adapted locally according to the different local contexts, (see [http://www.pandemicpreparedness.org/categories/details.aspx?section_id=5&sub_section_id=37](http://www.pandemicpreparedness.org/categories/details.aspx?section_id=5&sub_section_id=37) for the Pandemic mitigation and response country planning matrix).
### Case Study - IFRC

#### Belarus: pandemic preparedness and response remain on track

30 August 2010 By Victor Lacken, Belarus

Perhaps one of the most interesting aspects of the IFRC’s pandemic preparedness and response programme has been the diversity of the strategies used by National Societies around the world. From soup kitchens in Serbia to barazas (or public gatherings) in Kenya, National Societies have been adapting the IFRC’s key pandemic-related messages and applying them to their own unique situations. The Belarus Red Cross is a case in point. When you catch an intercity train from Minsk to Vitebsk, it is hard to avoid the message that it comes to pandemics, your best defence is you. Uniquely, Belarus has an entire Red Cross branch run by and for the railway. One of the branch’s main goals is to prevent the spread of disease among passengers and staff.

#### Your best defence is you

“The railway branch basically echoes the same mission of the Red Cross network throughout Belarus. By working with the railway, we can reach people all over the country,” says the IFRC’s Alexandra Makarova in Belarus. And working with the railway means the Red Cross pandemic influenza messages are ubiquitous. In Minsk, there are a number of large TV screens around the railway station that repeat the Russian-language version of the Federation’s video to teach people about how to stay safe from pandemic influenza. And the only posters you’re likely to see on the walls are the ones put there by the Red Cross explaining the five ways to better pandemic protection. And to really reinforce the message, once you step on the train there are pandemic preparedness and response messages everywhere. You may, for example, find a preparedness and response bookmark on the table by your seat or see the same 30-second video playing on the TV screen above your head. You may even hear an announcement from the conductor about pandemic influenza over the train’s tannoy.

Railway medical staff prepares the information and the Red Cross prints the leaflets and bookmarks which are distributed on trains.

To sustain the information on responding to emergencies such as epidemics or to a pandemic, the messages should be fully integrated with a developmental approach that includes longer-term health programmes. “Community-based health and first aid in action” (CBHFA) is one of the RC/RC community-based approaches to long-term capacity building for improved health programmes and community development. It includes an implementation guide, a facilitator guide, a volunteer manual and community tools ([http://www.ifrc.org/PageFiles/53437/CBFA-volunteer-manual-en.pdf](http://www.ifrc.org/PageFiles/53437/CBFA-volunteer-manual-en.pdf)). The second one is the Epidemic Control for Volunteer (ECV) manual and toolkit which is another institutionalized information and training package that focuses on the management of epidemic disease...
outbreaks. The ECV is innovative in two different ways. First, this tool capitalises on using locally available resources, such as the RCRC and other volunteers who are in their communities, trained, eager to assist, it provides tools to assist them to be more effective, efficient and rapid. Second, the structure of the manual and toolkit provides comprehensive training when preparedness is taking place and the ability to use ONLY the relevant information for a specific disease and actions related when that disease causes an epidemic and there is no time to provide full training for response activities. The mini-guide that results from selecting the right tools is short, effective, rapid, action oriented, can be replicated widely and can be used with minimal training. (http://esango.un.org/innovationfair/?page=viewProject&nr=2).

Preparing community health workers and families

Guidance and training resources have been developed to build the capacity of community-based health workers and families to move services to the community level and to manage the common causes of morbidity and mortality during an influenza outbreak or a pandemic:

- WHO Community Case management during an influenza outbreak
  - CCM Participant's Handout http://whqlibdoc.who.int/publications/2011/9789241501866_eng_handout.pdf (File size: 2.28 MB)
- CDC: Caring for someone sick at home, http://www.cdc.gov/h1n1flu/homecare/
- Home treatment of influenza http://www.savethechildren.org/atf/cf/%7B9def2ebe-10ae-432c-9bd0-df91d2eba74a%7D/WOODSON_HOME_CARE.PDF

These tools were developed to ensure the continuation of basic health services when health systems are overwhelmed or disrupted. They were developed for use in a pandemic but can be adapted to any emergency setting.

These guides, manuals and tools were created to reflect the insight and knowledge of those working within communities. The community tools consist mainly of illustrations, meaning that they can easily be used in the by volunteers, regardless of literacy.
VII. Key Messages

• National strategies and policies are not enough to prepare for disasters and emergencies, such as a pandemic, but require community participation and consultation, linkages with partners at all levels and operational planning not just at the national level but at and with the community.
  o In order to strengthen prevention and control of avian and human influenza, wider societal and community-level agreement and commitment to change is required in order to facilitate the successful adoption of public health-oriented recommendations at the individual level.
  o A strategic framework for sustainability in community-based disaster management should be established, and best practices should be widely disseminated among various stakeholders through training programmes and follow-up to support ongoing implementation.

• Interventions that target community and households to enhance early detection and reduce the spread of communicable diseases, such as pandemic influenza, can be harmonized across vertical disease control and preparedness and response programs, be applied to other emergencies, and have collateral health benefits to reduce the incidence of other communicable illnesses during the times of increased public health campaigning.
  o The principles of community-based surveillance can be successfully applied in any community around the world to increase the ownership and capacity of communities to detect and respond to disease outbreaks.

• Changing behaviours and having the knowledge at the household and community levels to prevent, mitigate, prepare and respond to pandemic and other hazards is dependent on the production of key messages and behaviour change BEFORE an emergency or disaster.
  o Communication material needs time and attention in country, at the local level, to be tested adapted and retested, to ensure local acceptance and understanding before a pandemic or other emergency.

• Jointly developed commune and civil society pandemic preparedness and response plans, resulted in strengthened capacity and capability to conduct situational analyses, activity planning, including responsibilities of government and community, and mobilizing local resources for pandemic and other disasters.
  o In order for community-based programmes to be sustained, implemented, monitored, evaluated and adjusted sustainable mechanisms need to be in place, including financing for human resources (community-based health workforce), materials, commodities, and so forth.

• Programmes that have shown to be the most effective as those that are Community focused, driven, owned, accepted and sustained.
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