

## **Urgent Support for Developing Countries' Responses to the H1N1 Influenza Pandemic**

Four monthly update on resources mobilized and activities undertaken by WHO, UN System and IFRC to support the least resourced countries in strengthening readiness and response to the H1N1 Influenza Pandemic

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World Health Organization  
UN Office for the Coordination of Humanitarian Affairs  
UN System Influenza Coordination

## **Introduction**

On 25 April 2009, WHO announced the emergence and rapid spread of a novel influenza virus, influenza A (H1N1) 2009. On 11 June 2009, WHO declared an influenza pandemic (Phase 6): the virus spread across the world rapidly and was reported from all WHO regions in less than six weeks. As of 1<sup>st</sup> February 2010, the virus was reported to be affecting populations in more than 198 countries and territories.

Although the initial impact of the pandemic was greatest within industrialized countries there was concern from the outset that the people in the least resourced countries would be most affected because of the higher prevalence of risk factors in many developing country populations, the limited capacity their health systems and their relative inability to access recommended vaccines and antiviral medicines.

In light of the concerns raised about the potential health impact in low resource countries, in July 2009, the United Nations system and partners sought to identify and highlight the priority developing countries' needs to support their response to the A(H1N1) influenza pandemic. An "Urgent Needs Assessment and Prioritization" (UNIP) process was undertaken and 64 out of 77 Least Developed Countries and other "GAVI-eligible" developing countries – referred to as the Least Resourced Countries (LRC's) in this paper – elected to participate in the process.

The conclusions of the UNIP process were presented in a report entitled "Urgent Support for Developing Countries' Responses to the H1N1 Influenza Pandemic". This report highlighted priority needs for medicines, vaccine and supplies, laboratory and surveillance services, communications capacity, investing in pandemic readiness, and needs of entities responsible for supporting regional and international cooperation.

The report was presented to governments of nations offering development assistance by the WHO Director-General Dr Margaret Chan and the UN Systems Influenza Coordinator Dr David Nabarro during the UN General Assembly in September 2009. A total of \$1.48bn was requested to support the least resourced countries as they sought to realize their priority needs. The UN system committed to report on progress made towards addressing the gaps identified through the UNIP process on a four monthly basis.

The purpose of this document is to provide the first of the regular four monthly updates on:

- Resources that, under the flexible financing framework, have been mobilized to assist least resourced countries in meeting the priority, urgent needs that were identified and highlighted during the UNIP process (Section 1)
- Activities undertaken by WHO, UN System and IFRC to assist least resourced countries in meeting the priority, urgent needs to strengthen their readiness and response to pandemic H1N1 (Section 2)

## **Section 1: Update on Resources Mobilized to Support Meeting the Urgent Needs of the Least Resourced Countries Identified Through the UNIP Process**

### **1.1 Flexible Financing Framework**

Because of the urgency and complexity of the pandemic H1N1 situation, rather than a single, vertical funding mechanism a flexible financing framework embracing a variety of funding mechanisms was proposed as the best means of providing financial support to least resourced countries. The flexible financing mechanism allows funding to assist least developed countries to be provided through five different mechanisms as shown in Box1 below.

#### ***Box 1: Flexible Financing Framework***

**WHO Public Health Emergency Fund**, the primary purpose of this fund is to enable WHO to directly respond to and mitigate the current outbreak situation in accordance with the WHO Pandemic Influenza A/H1N1 response plan.

**Multilateral Support to UN Agencies, International Organizations and NGOs**, where donor governments or development banks provide support to UN agencies, international organizations and NGOs for specific programs.

**Bilateral Support to Governments**, where donor governments or development banks provide direct bilateral assistance, either through changes to existing agreements or through the provision of new arrangements.

**Pooled Support to UN Agencies through the multi-donor Central Fund for Influenza Action (CFIA)**, which enables donors to pool their resources and support under-funded priority activities within the strategic framework of the Consolidated Action Plan for Avian and Human Influenza, whose objectives include Human Health, Communication, Public Information and Supporting Behaviour Change, and Continuity under Pandemic Conditions.

**Pooled Grant Support to Governments through the World Bank's Avian and Human Influenza Facility (AHIF) and the World Bank's Global Program for Avian Influenza Control and Human Pandemic Preparedness and Response (GPAI)**. The grant-based AHIF has received contributions from nine donors, led by the European Commission. It assists countries in implementing integrated country programs to minimize the risk and socioeconomic impacts of pandemic influenza. The loan-based GPAI helps countries finance emergency operations to prevent and control outbreaks of pandemic H1N1.

The sections below provide the most update to date information on funds received to date through the various financing mechanisms that have been utilized to support least developed countries strengthen readiness and response to pandemic H1N1. In addition to financial contributions, in-kind donations of pharmaceuticals and consumables have also been provided to assist countries in meeting priority needs. Details of the in-kind donations that were made through WHO are also included.

## 1.2 WHO Public Health Emergency Fund

This fund received in total \$121,773,066 since the beginning of the pandemic. Details of the sources of these funds are given in Annex A and a description of the activities that have been supported through this funding is given in Section 2. This information is based on information provided by WHO through their financial accounting system. For further details, please contact Ludy Suryantoro at WHO HQ in Geneva.

Total funding raised by WHO for <b>global response plan</b> <sup>1</sup>	\$73,773,066	61%
Total funding raised by WHO for <b>vaccines deployment</b> global operations	\$48,000,000	39%
<b>Grand Total Funding raised by WHO for both global response and vaccines deployment</b>	<b>\$121,773,066</b>	<b>100%</b>

## 1.3 Bilateral Support to UN Agencies, International Organizations and NGOs

With the exception of WHO (see 1.2) very limited new funds specifically for pandemic H1N1 activities have been received by UN agencies or the IFRC.

However many of the key agencies have been requested by governments to provide urgent support to assist in meeting priority needs identified through the UNIP process. An overview of the areas of support that have been provided thus far are given in Section 2. As only limited new funding have been made available to date, this support has been funded mostly through reallocation of existing funds through one or more of the following mechanisms:

- Organization's emergency or contingency funds
- Reallocation of agencies' core funds
- Reprogramming/refocusing of existing, related programmes to address pandemic specific needs
- Temporary reassignment of staff to provide urgent technical assistance.

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<sup>1</sup> A proportion of this money has been used to support countries that did not participate in the Urgent Needs Identification and Prioritization process. However it is understood that the majority of these funds will have provided either direct or indirect support to least resourced countries. For further details please contact WHO.

<b>Table 2: Multilateral Support Direct to UN Agencies and IFRC<sup>2</sup> as of end January 2010</b>		
<b>Organization</b>	<b>New Funds received specifically for pandemic H1N1 response (USD)</b>	<b>Internal agency allocated funds (USD)</b>
UNICEF	NONE	In addition to resources utilized by Country Offices for local responses to H1N1, some US\$ 14 million have been allocated to facilitate H1N1 responses <sup>3</sup>
WFP	NONE	
UNFPA	NONE	Emergency funds made available
UNHCR	NONE	CFIA funds refocused and utilized to provide support – see Tables 4 and 5
IOM	NONE	
ILO	NONE	
FAO	NONE	
OIE	NONE	Existing H5N1HPAI surveillance systems and funding used to support enhanced surveillance and communications activities
UNWTO	NONE	
PIC/OCHA	\$665,000	Proportion of CFIA funding refocused to support H1N1 readiness and response activities (see Table 4)
IFRC	\$2,400,000	

#### **1.4 Bilateral Support to Governments**

Details of bilateral support to least resourced countries to support urgent needs in relation to pandemic H1N1 has been collected through two methods:

- A poll of major donors conducted by the World Bank in January 2010
- Collating information inputted directly by donors onto the web based Financial Tracking System (FTS) that is run by OCHA<sup>4</sup>.

It should be noted that although using these two methods has provided some information, it is unlikely that this has captured all bilateral financial contributions or all of the in-kind donations of consumables or technical assistance.

<sup>2</sup> Information provided by individual agencies

<sup>3</sup> UNICEF figures are approximate and are currently being verified at country level

<sup>4</sup> The FTS is a database which records all reported international humanitarian aid (including that for NGOs and the Red Cross / Red Crescent Movement, bilateral aid, in-kind aid, and private donations). All FTS data are provided by donors or recipient organisations. URL: <http://www.reliefweb.int/fts>

<b>Table 3: Bilateral Donations Direct to Governments<sup>5</sup></b>		
<b>Recipient country</b>	<b>Donor</b>	<b>Amount in USD</b>
Ukraine	Austria, Estonia, Greece, Israel, Lithuania, Switzerland	\$608,160
Lao PDR	Asian Development Bank	\$250,000
Mongolia	Asian Development Bank	\$350,000
Recipient countries to be determined but likely majority will be least resourced countries	Germany	\$17,300,000
Variety of Pacific Island Countries	Australia and USA via the Secretariat of the Pacific Community	\$376,516
Bangladesh	UK	\$410,000
Afghanistan	USA	\$166,239
Cote D'Ivoire	USA	\$350,000
India	USA	\$1,376,834
Indonesia	USA	\$416,227
Kenya	USA	\$2,350,000
Senegal	USA	\$298,294
Tanzania	USA	\$740,000
Vietnam	USA	\$175,000
Countries in the Southern Hemisphere. Recipient countries to be determined but likely majority will be least resourced countries	USA	\$4,000,000
Afghanistan	Canada	In-kind donation of consumable, non-vaccine supplies including antibiotics, syringes and gloves
Additional bilateral support to multiple countries via: TEPHINET	USA	\$500,539
US CDC International Support Programme		\$590,000

<sup>5</sup> Information from Ukraine is from OCHA's Financial Tracking System (FTS). Information on the USA's donations obtained from the United States Department of State. All other information is from the World Bank's Donor Polling January 2010.

## 1.5 Pooled Support to UN Agencies through the multi-donor Central Fund for Influenza Action (CFIA)

USAID and DFID provided funds to CFIA during 2009 totaling \$6.725. The majority of these funds were committed before the pandemic began to support pandemic preparedness activities across the UN. Some additional funds specifically to assist pandemic H1N1 response have been pledged but not yet committed.

### (a) Agency Projects

As a result of decisions made by the board in December 2009, the following projects that will be undertaken during 2010 have been endorsed. The board permitted redesign of original project proposals so that funds and support can be focused on assisting least resourced countries in addressing the urgent pandemic readiness and response need identified through the UNIP process. The approximate amount of funding for each project that will be used to specifically to support least resourced countries in responding to the urgent needs pandemic related response and readiness needs is provided in the third column.

<b>Agency</b>	<b>Project</b>	<b>Approximate amount to support LRC in meeting urgent needs</b>
ILO	Business Continuity in times of pandemic – Protecting workers and businesses through preparedness measures (Indonesia) and Influenza Prevention, Pandemic Preparedness and Business Continuity at the Workplace (Cambodia, Lao PDR, Malaysia, Vietnam – project based in Thailand)	\$290,000
IOM	Humanitarian pandemic preparedness, mitigation and response: Capacity Building for Migrants and Host Communities in selected countries in Asia, North Africa and the Middle East	\$495,000 <sup>7</sup>
IOM	Migrant community information for behaviour change to reduce the spread of influenza-like illnesses (Nigeria, Costa Rica and Ukraine)	\$119,254
OCHA-PIC	Pandemic Influenza Contingency team work programme	\$750,000
UNHCR	Humanitarian response to pandemic influenza A(H1N1) in refugee settings	\$990,000
UNHCR	Humanitarian response to pandemic Influenza in refugee settings in the Middle East and North Africa region	\$245,045
UNICEF	H1N1 response (Pakistan)	\$313,510
WFP	World Food Programme Pandemic Preparedness – Phase III	\$2,969,250 <sup>8</sup>

<sup>6</sup> Information provided by CFIA. Proportional spend on H1N1-specific activities estimated by individual agencies

<sup>7</sup> IOM is underfunded for these activities and will need to look for additional funds if these activities are to be continued in Indonesia, Vietnam and Senegal.

<sup>8</sup> These funds refer to costs associated with initiatives to assist least resourced countries in achieving improved levels of pandemic preparedness and response.

***(b) Small Grant Fund***

In March 2009, a small projects fund was established within the CFIA to enable UN Resident Coordinators to support multi-sectoral pandemic preparedness and business continuity planning processes. The fund is managed by the Pandemic Influenza Coordination team in OCHA. Two donors have contributed \$1.1m to the fund, which has supported 14 projects in 13 countries. Some of these programmes were initiated before the onset of pandemic H1N1, and some of the funding went to countries not covered by the UNIP process. The funding that has been allocated to support pandemic H1N1 readiness and response related projects in the least resourced countries is listed below. Discussions are underway about a possible new contribution to the fund to support further high priority whole-of-society requests from least resourced countries.

<b>Country</b>	<b>Approximate amount of funding used to meet urgent needs identified through UNIP process</b>
Bolivia	\$22,800
Ghana	\$100,000
Guinea-Bissau	\$100,000
Indonesia	\$96,900
Madagascar	\$75,000
Nepal	\$129,000
Vietnam	\$64,200

**1.6 Pooled Grant Support to Governments through the World Bank’s Avian and Human Influenza Facility (AHIF) and the World Bank’s Global Program for Avian Influenza Control and Human Pandemic Preparedness and Response (GPAI)**

No new money specifically for H1N1 readiness and response was donated to either the AHFI or the GPAI. However a number of least resourced countries (Afghanistan and Laos) requested approval to refocus a proportion of their existing funds from these facilities to support H1N1 readiness and response. Under the terms of the original agreements this was permitted and hence some funds from these facilities were used specifically to support pandemic H1N1 readiness and response activities.

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<sup>9</sup> Information provided by CFIA. Proportional spend on H1N1-specific activities estimated by OCHA-PIC

## 1.7 In-kind donations – consumables, equipment and technical assistance

In addition to financial contributions, WHO has managed the following in-kind donations support least resourced countries:

**Table 6a: In kind vaccine donations to WHO**

<b>DONORS</b>	<b>VACCINE DOSES (in millions)</b>
Australia	2.1
Belgium	1.62
Canada	5.0
CSL	3.0
France	9.4
GSK	60.0
Medimmune	3.0
Norway	0.94
Sanofi Pasteur	20.0
USA	15.0
<b>TOTAL DOSES</b>	<b>115.06</b>

**Table 6b: In kind antiviral donations through WHO**

<b>DONORS</b>	<b>AREAS OF SUPPORT</b>	<b>AMOUNT IN US DOLLAR (including PSC)</b>
ROCHE	Donation of antivirals	\$84,000,000
<b>TOTAL USD VALUE</b>		<b>\$84,000,000</b>

## **Section 2: WHO, UN System and IFRC Activities to Support the Least Resourced Countries in Meeting the Urgent, Priority Needs Identified through the UNIP Process**

### **2.1 Overview**

The September 2009 report on ‘Urgent Support for Developing Countries’ Responses to the H1N1 Influenza Pandemic’ identified nine key areas where the least resourced countries who participated in the UNIP process were seeking support to enable them to strengthen their readiness and response to H1N1 pandemic influenza. These were divided into two main categories of support:

- **Category One: Essential Medicines**
- **Category Two: Strengthening Country Readiness**

The purpose of this section is to provide details of the support that WHO, the UN System and IFRC has provided to developing countries to help address these needs.

Due to the pressures that many countries are currently facing in responding to H1N1 pandemic influenza outbreaks, it has not been possible to complete a detailed country based survey of activities at this point in time. The description of the activities to meet the urgent needs described in this update therefore focuses on WHO, UN System and IFRC support only. It should therefore not be seen as a comprehensive summary of all the support that has been provided by bilateral partners, technical institutions, NGO’s or, very importantly, the activities that countries themselves have instigated.

The nine key areas for support highlighted in the September report are discussed below. For each area a very brief overview of previously identified needs is provided followed by a summary of activities undertaken since September 2009 to meet those needs.

### **2.2 Category One: Urgent need for essential medicines to treat severe cases and vaccine to protect health care workers and other essential service personnel**

#### **2.2.1 Objective A: Increase access to antivirals to treat severe illness**

##### ***Previously identified urgent needs***

The majority of developing countries requested assistance with access to and procurement of antiviral medicines. In September 2009, WHO estimated that between 3 and 6% of the population in least resourced countries may require antiviral treatment. For the least resourced countries covered by the UNIP process it was estimated that around 78 million treatment courses would therefore need to be provided to ensure that those with severe illness could be treated.

***Progress in meeting the urgent needs***

Growing international experience in treating pandemic (H1N1) 2009 infections indicates the importance of early treatment with antiviral drugs, especially for patients at increased risk of developing complications and those with severe illness.

As part of WHO's global strategy to address the risks of [emergence of a new Influenza virus / Influenza A/H5N1], WHO had established global stockpiles of influenza antivirals and personnel protective equipment, including stockpiles to support Rapid Containment Operations and stockpiles to support regional preparedness and for rapid deployment to countries.

Since April 2009, WHO Regional Offices, and Headquarters have deployed over 4.7 million treatment courses of Oseltamivir to 128 countries worldwide from combined global and regional stockpiles. To date, deployment of 4,710,869 antiviral courses have taken place as follows:

<b>AFRO</b>	1,138,883	<b>EURO</b>	786,016
<b>SEARO</b>	1,037,418	<b>AMRO</b>	746,712
<b>WPRO</b>	546,360	<b>EMRO</b>	455,480

WHO has used pre-existing arrangements and established Standard Operating Procedures (SOPs) with the World Food Programme (WFP) UN Humanitarian Response Depot (UNHRD) Network hubs in Dubai, UAE and Panama as well as commercial shipping agents to ensure efficient delivery of antivirals to Member States.

New donations of antivirals have been received and prepositioned at regional and central level to replenish all stockpiles, including the strategic stockpile for Rapid Containment Operations.

**2.2.2 Objective B: Increase access to essential antibiotics for treatment of patients with bacterial complications**

***Previously identified urgent needs***

The majority of developing countries requested assistance with access to and procurement of antibiotics. WHO estimated that between 3 and 6% of the population in least resourced countries may require antibiotic treatment. For the least resourced countries covered by the UNIP process it was estimated that around 39 million treatment course would need to be provided to complement national stocks to ensure that those with severe illness could be treated.

***Progress in meeting this urgent need***

At this time WHO has received no specific requests from Member States regarding access to antibiotics in relation to the pandemic of influenza A (H1N1).

### **2.2.3 Objective C: Increasing access to pandemic influenza H1N1 vaccine for use in protecting health care workers and other essential service personnel**

#### ***Previously identified urgent needs***

The Strategic Advisory Group of Experts (SAGE) on Immunization recommended in that pandemic influenza vaccines should be offered, as a priority, to health care workers to ensure continuity of health services in the face of pandemic influenza. Vulnerable groups, such as pregnant women and people with chronic underlying medical conditions, should also be offered vaccination to protect them from serious illness.

Based on these recommendations the Director General committed to working with donors, government and industry to provide sufficient vaccine to the 96 countries would did not have access to other supplies of vaccine to ensure that 5 to 10% of the population could be vaccinated. It was initially estimated that 300 million doses of pandemic vaccine would be required to achieve this. This was reduced to 200 million doses when it became clear that only one dose of vaccine was required to protect adults.

#### ***Progress in meeting this need***

WHO launched a Pandemic Vaccine Donation Initiative in October 2009 with the aim of providing, as quickly as possible, sufficient vaccine to ensure 2% of the population in the 96 countries could receive vaccine followed by a further 8% as supplies became available.

WHO has taken a leadership role in organizing the receipt of donations, deployment vaccines and support to countries with the planning and distributing vaccines to target groups.

To date WHO has received pledges from 4 manufacturers of vaccines or ancillary equipment and 11 countries for donations of approximately 200 million doses of pandemic (H1N1) 2009 vaccine and related products. Seven additional donors have also committed resources to fund deployment in developing countries.

It should be noted that this is an evolving programme. Details of progress on vaccine deployment as at 28 February 2010 are provided in Annex B. However for most up to date details donors should contact WHO directly.

The following agencies are working in collaboration with WHO on the Pandemic Vaccine Donation Initiative:

- **UNICEF** is working with WHO in a number of countries to provide assistance with planning for in-country distribution of vaccines.
- **UNOPS** has been contracted by WHO to support the shipment of vaccine and ancillary products from manufacturers to recipient countries.
- **WFP** is working with WHO to plan additional logistic assistance to support in-country vaccine distribution in hard to reach areas.
- **UNHCR** is working with WHO to ensure that vaccine can reach refugee populations without discrimination, notably the health care workers who care for refugees and displaced person. UNHCR is also supporting public health authorities to plan vaccination at district level.
- **PIC/OCHA** has worked in conjunction with WHO to produce guidance for countries to support decision making on the need or otherwise to supplement business continuity planning with vaccination of essential workers to reduce vulnerabilities in key, non health sectors

## **2.3 Category Two: Strengthening Country Readiness**

### **2.3.1 Overview**

For a variety of reasons, new funding to support a number of activity areas under Category Two has been extremely limited. This is particularly true for the ‘non health’ activities such as Objective B: Communications and Objective C: Whole of Society Readiness.

Where support to countries has been provided, this has mostly been achieved through re-programming of existing funds, temporary reassignment of staff or re-focusing of programmes to allow inclusion of urgent H1N1 pandemic assistance. As such, progress in meeting requests for urgent assistance in a number of these areas has been limited and it may not in the future be possible to sustain support in non health areas without creating negative impacts on other programmes.

That said it has been clearly recognised by all partners that investments in country readiness has, in addition to strengthening H1N1 response, benefited day to day capacity to manage health issues (e.g. improvements in pneumonia care), improved in hand hygiene, strengthened every day communications about health issues and is likely to have also strengthened capacity to deal with high impact events – no matter what the cause – in the future. Business continuity planning, for example, strengthens the resilience of organizations to withstand a range of possible threats.

### **2.3.2 Objective A: Strengthened Health System Response to Pandemic Influenza (H1N1), including operational plan for vaccine campaigns and post-marketing surveillance**

#### ***Previously identified urgent needs***

Many of the least resourced countries requested support to strengthen the health system response to pandemic (H1N1). Three areas for support were requested:

- **A1:** Review and adapt national plans and guidelines for immediate response to pandemic influenza (H1N1) 2009, including operational planning for vaccine campaigns and post-marketing vaccination surveillance
- **A2:** Health care worker training to strengthen case management and infection control
- **A3:** Increased supply of essential pandemic H1N1 commodities to support case management and infection control

#### ***Progress in meeting these needs***

##### **A1: Health System Planning**

- WHO has held in total nine workshops across all WHO regions to brief and train country staff from all of the 96 eligible countries on vaccine deployment and to assist them in preparing national vaccine deployment plans.
- Criteria and checklists to assess country readiness have been developed by WHO
- Recipient governments, in cooperation with WHO and other UN partners, are now preparing operational plans for vaccine campaigns and developing their community mobilization and communication strategies and tools. As of 28 February 2010, 37 countries have plans in place.

#### A2: Health Care Worker Training

- WHO has revised and released guidelines on ‘Clinical Management of Human Infection with Pandemic (H1N1) and on ‘Use of Oseltamivir in Immunocompromised Patients’ and development has begun of a pandemic influenza clinical management training curriculum for health care professionals
- A training package for community health workers in resource-poor settings has been developed by WHO and field tested in Southern Sudan. A WHO district hospital training package for management of severe respiratory disease was completed and field tested in South Africa, Ethiopia and Uganda.
- A community health worker training module for home care, health education and case management of influenza-like-illness was finalized by WHO and field-tested in Sierra Leone and Tajikistan
- Experts in case management and infection control were, on request of governments, deployed by WHO GOARN to support urgent needs in the following least resourced countries: Bolivia, Honduras, Nicaragua, Haiti, Mongolia and Ukraine

The following agencies are working in collaboration with WHO to support least resourced countries in meeting their urgent needs for strengthening **health care delivery** for pandemic H1N1.

- **UNICEF** is working to improve preventative and/or curative services for major child killers (pneumonia and diarrhoea) through training programmes to raise awareness amongst health care workers and integration into IMCI community programmes
- **UNHCR** is working to ensure health care workers who care for refugees are aware of pandemic influenza and the necessary case management using updated guidelines produced at country level by Ministry of Health or/and at global level by WHO.
- **IOM** is working to ensure that community health care and non health workers who care for migrants are aware of pandemic influenza and the necessary case management
- **UNFPA**, noting that around one fifth the deaths from H1N1 globally have been in pregnant women, UNFPA is working with WHO and UNICEF to explore how best to assess the risks of the pandemic to maternal health and how best to address this issue
- **IFRC** is working alongside and in partnership with UN systems to assist with community and local, lay level health training and home care information and support schemes in over 90 countries

All of the work above is likely to have had benefited the response to H1N1 pandemic. But equally importantly this investment in strengthening health care for patients with acute respiratory illnesses is likely to have ongoing health benefits by strengthening pneumonia care for children – the leading cause of death in under 5’s – as well as, hopefully, an improved recognition of the importance of early and aggressive treatment of pneumonia in pregnant women which accounts for around 10% of a maternal deaths in some developing countries even without a pandemic

### A3: Increased supply of essential pandemic H1N1 commodities

#### ***Previously identified urgent needs***

The majority of least developed countries requested support in accessing and procuring essential commodities, particularly personal protective equipment, oxygen and intensive care equipment.

#### ***Progress in meeting these needs***

156 investigation kits, including sample collection equipment, personal protection equipment and transport boxes have been deployed throughout the six WHO Regions. In addition, in response to requests from Cuba and Argentina, WHO has deployed 500 personal protection equipment kits directly to both countries to meet particular needs at specific times. Other medical related equipment has been provided as necessary.

### **2.3 3 Objective B: Strengthening Communications for Pandemic Influenza (H1N1)**

#### ***Previously identified needs***

Many countries requested assistance to strengthen their communications. Four key areas for support were identified through the UNIP process in September 2009 (a) operational communications (b) media communications (c) planning of communications strategies (d) development of communications materials.

As a result of pandemic vaccine being made available to least resourced countries, additional urgent communication needs have arisen related specifically to supporting effective uptake of pandemic vaccine. As far as possible communications about vaccine has been integrated into the broader pandemic related communications. There has though been a need to develop some vaccine specific materials and strategies.

#### ***Progress in meeting these needs***

WHO has taken a lead in developing key technical messages for communications and in developing specific training packages to support communications related to pandemic vaccine programme. WHO has produced guidance on behavioural targets for communications officers to provide consistent messaging on prevention and mitigation strategies.

WHO Communications and technical staff currently hold weekly virtual press briefings and brief journalists at the United Nations in Geneva twice per week. Communications staff also prepare materials to support the Organization and Member States in their communications interactions and monitor the media to improve communications.

WHO's website continues to be a key vehicle for delivering information to a variety of audiences, including technical guidance to health professionals, personal protection measures to individuals, and general information and updates to journalists and the general public.

Assessment of need for local and culturally appropriate adaptations of key health messages for communities has been performed, and reinforces the requirement for further action in this crucial area for effective messaging.

Weekly teleconferences with regional offices, UN partner agencies, and Ministries of Health continue to ensure ongoing communications and consistency of messaging.

The following agencies are working in collaboration with WHO to specifically support least resourced countries in meeting their urgent needs for strengthening **communications** for pandemic H1N1.

- **UNICEF** communications for development programme is providing support with behaviour and social change interventions to over 55 of the least resourced countries that have requested this type of assistance. In line with the key behavioral interventions agreed to in conjunction with WHO, UNICEF has updated and made available through a specific, easily accessible website<sup>10</sup> a large range of ‘influenza resources’ and the on line CREATE! Toolbox<sup>11</sup>. The latter, allows governments, UN programme managers and NGO’s from least resourced countries to produce communication materials to meet the needs of communities affected by H1N1 in a matter of hours or days.
- **UNICEF** is working closely with **WHO** and **AED** to support governments and communities in the development and implementation of effective communications to support the pandemic vaccine programme.
- **IOM and UNHCR** have, respectively, produced pandemic related materials for migrants and refugees. In addition IOM has launched a Training Manual on Basic Counselling and Communication Skills for pandemic preparedness for migrants and host communities
- **ILO** has worked in partnership with governments, workers and employers organizations to assist target countries in their efforts to inform, educate and train workers on animal influenza and pandemic human influenza issues linked to the workplace. Various types of communication materials have been distributed to promote awareness on safety and health issues relating to workers’ rights and protection, with the ultimate aim to prevent the spread of animal influenza and pandemic human influenza in formal and informal economies. Sharing of information and dissemination of good practices have been promoted through ILO’s knowledge management platform and monthly electronic newsletters.
- **UNWTO** has also managed the Tourism Emergency Response Network (TERN) in close cooperation with **WHO** and **ICAO**, which supports the timely identification and addressing of travel and tourism related coordination and communication needs and concerns. Through the ‘SOS.travel’ platform consistent and timely information was provided to travelers.
- **IFRC** has worked in partnership with the UN system to ensure that all opportunities to communicate the key messages are maximized and has mobilized its extensive community networks to effectively disseminate messages. **IFRC** has also convened US based NGO’s to coordinate responses and offered its assistance to the UN system with pandemic vaccine communication in hard to reach areas where IFRC has successfully supported vaccine programmes in the past
- **FAO and OIE** – both organization, in partnership with others, have undertaken extensive communications to reassure the public about the safety of well cooked pork meat and products as a good practice in food preparation (not specific for influenza viruses) and to improve understanding of animal origin influenza viruses and confirmation of negligible role that animals thus far play in the transmission of this virus in humans

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<sup>10</sup> <http://www.unicef.org/influenzaresources>

<sup>11</sup> <http://www.createforchildren.org/>

### **2.3.4 Objective C: Whole of Society and Humanitarian Readiness**

Below is a brief overview of how the UN System and IFRC are providing assistance to the countries that have requested urgent support in these areas.

#### **C1. Assistance with rapid assessment of vulnerabilities in different sectors and technical assistance with urgent planning to reduce vulnerabilities**

##### ***Previously identified needs***

41 of the least resourced countries requested support through the UNIP process to strengthen whole-of-society readiness in order to address possible vulnerabilities across a range of different sectors. The focus of requests for support was on (a) revising or developing national pandemic response plans in light of emerging knowledge about pandemic H1N1 and ensuring inclusion of all sectors and (b) sector-specific business continuity planning to ensure the continued provision of critical services to their populations.

##### ***Progress in meeting these needs***

**WHO and OCHA** have jointly produced guidance entitled: 'The Whole of Society pandemic readiness: Guidelines for pandemic preparedness and response in the non-health sector'. This document includes guidance on developing business continuity plans and identifying critical interdependencies. This has been distributed to all least resourced countries.

**OCHA's Pandemic Influenza Coordination (PIC) team** in response to the findings from the UNIP process, developed a tool to help UN Country Teams (UNCT's) assist governments requesting support with whole of society preparedness to identify their greatest vulnerabilities and prioritize high-value interventions to address these gaps within a relatively narrow timeframe. Based on the outcomes of the use of this tool by PIC/OCHA Regional Planning Officers in conjunction with UNCT's, the following urgent support has been provided:

- Data from OCHA PIC's pandemic readiness monitoring and guidance website ([www.un-pic.org](http://www.un-pic.org)) indicates that more than 30 countries produced or revised their national pandemic plans in 2009. Of the 77 least resourced countries surveyed for the UNIP process, over 20 updated their national plans in 2009. Yet despite this evidence of planning activity, plans in least resourced countries tend to be of sub-optimal quality, and there is only sparse evidence of multi-sectoral planning.
- OCHA's Pandemic Influenza Coordination (PIC) team, through its global network of Regional Planning Officers, has provided direct technical assistance to a number of countries having requested assistance with multi-sectoral pandemic preparedness through the UNIP process. Working with national disaster management authorities (and in some cases with Ministries of Health) in close collaboration with UN Country Teams, OCHA PIC has facilitated simulation exercises, contingency planning workshops, and training events in Kyrgyzstan, Tajikistan, Turkmenistan, Bangladesh, Bolivia, Bhutan, Indonesia, Lao PDR, Myanmar, Nepal, Malawi, Seychelles, Zambia, Madagascar, Mozambique, Angola, Republic of Congo, Ghana, Lesotho, Tanzania, Uganda, Nigeria, Senegal, and Togo.
- Experience in pandemic preparedness efforts over the past several years has demonstrated that one of the main barriers toward UN Country Teams (UNCTs) being able to take the initiative to support governments to develop multi-sectoral "whole-of-society" pandemic preparedness and response interventions beyond the health sector has been a lack of financing available for such interventions. As a modest stimulus to UNCTs to develop a stronger portfolio in this area, the United Nations Central Fund for Influenza Action (CFIA) established a small Funding Facility in 2009 to finance small, high-value projects

to support national governments to strengthen multi-sectoral pandemic preparedness and response processes in countries lacking adequate capacity and resources. This Funding Facility enables the best proposals emanating from UNCTs to be delivered, with a preference for proposals that have the maximum potential for wider replication and take-up, thereby resulting in a greater quantity of UNCT-supported multi-sectoral pandemic preparedness and response activities, and hence faster progress toward better multi-sectoral pandemic preparedness and response in a number of countries.

**ILO** has focused attention on the importance of business continuity for small and medium sized enterprises – some of the most vulnerable to absenteeism – and has produced guidance that will be made available to some of the least resourced countries.<sup>12</sup> ILO's initiative aims at increasing resilience by encouraging the identification of the risks which might affect a specific business or organization and promoting the formulation of response strategies through a participatory process. In Indonesia, ILO's material was integrated into national guidelines on business continuity planning before being tested and widely distributed through the networks of the Ministry of Manpower and Transmigration and the Ministry of Health.

#### C2: Specific assistance for LDC's in receipt of humanitarian assistance to assess, plan and reduce sector vulnerabilities

##### *Previously identified needs*

As a result of concerns that pandemic H1N1 would disproportionately affected LDC's and potentially (a) threaten the continuity of existing humanitarian support and/or (b) create new caseloads, specific attention has been placed in strengthening business continuity for humanitarian services and assessing emerging vulnerabilities.

##### *Progress in meeting these needs*

**WFP**, amongst the other activities prior to the influenza A/H1N1 outbreak, completed Pandemic Logistics Corridor Capacity Assessments (PLCCAs) for East and Southern Africa Logistics Corridors and the North-South [Economic] Corridor in southeast Asia. The assessments were revisited during the pandemic and have provided an analysis of transport modes and the capacity of the logistic networks, including a pandemic impact analysis on the logistic networks, for improved supply chain management and informed decision making.

In addition WFP has developed Pandemic Operational Action Plans (OAPs) to harmonise non health aspects of pandemic response among humanitarian actors and national governments. Thematic areas addressed include Logistics, Coordination, Communication, Administration, Human Resources, Finance and Security. This process was accelerated during the early stage of pandemic H1N1 and to date, 80% of countries where WFP is present and providing food assistance have completed OAP's with their counterparts in government. Progress is ongoing and best practices are being readily shared with humanitarian partners.

**UNHCR** has in place robust business continuity plans for all its humanitarian services. These plans were refined in light of pandemic H1N1 and have been regularly tested and strengthened. Necessary stockpiling and means of securing continuity of emergency, life saving supplies has also been undertaken.

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<sup>12</sup> [http://www.ilo.org/employment/Whatwedo/Publications/lang--en/docName--WCMS\\_115048/index.htm](http://www.ilo.org/employment/Whatwedo/Publications/lang--en/docName--WCMS_115048/index.htm)

**The Humanitarian Pandemic Preparedness (H2P) initiative** is led by the International Federation of Red Cross and Red Crescent Societies (IFRC) in close partnership with the Core group, Academy for Educational Development (AED), InterAction and the American Red Cross, collaborating closely with the UN system through PIC/OCHA. These agencies have worked closely with National Red Cross/Red Crescent Societies in over 100 countries to strengthen community-level capacity to mitigate the impacts of a pandemic. Key activities have included (a) social mobilization (b) strengthening community resilience (c) focused attention to population with humanitarian needs and other vulnerabilities.

The **Humanitarians in Pandemic (HIP) network**, coordinated by PIC/OCHA in collaboration with IFRC, has been mobilized. Through this network information and best practice have been shared amongst key humanitarian agencies, coherent approaches have been promoted and opportunities for in-country collaboration have been identified.

### **2.3.5 Objective D: Strengthened Situation Assessment and Public Health Decision Making**

#### **D1: Strengthened Situation Assessment**

##### ***Previously identified needs***

Many least resourced countries requested assistance with strengthening surveillance systems and information collection, collation and analysis to support decision making.

##### ***Progress in meeting these needs***

WHO coordinates a Global Influenza Surveillance Network (GISN), which monitors influenza viruses, including their molecular and antigenic evolution. The GISN also analyses other virus properties (e.g. antiviral drug sensitivity), and provides a risk assessment of the public health implications. GISN comprises:

- 128 National Influenza Centres (NICs) in 99 countries
- 5 WHO Collaborating Centres for Reference and Research on Influenza (WHOCC)
- 4 Essential Regulatory Laboratories (ERLs)
- 11 WHO H5 Reference Laboratories.

Under the coordination of WHO, GISN laboratories detected the emergence of the pandemic (H1N1) 2009 virus, provided updated laboratory diagnostic assays and reagents, analysed trends among the proportion of circulating pandemic and seasonal influenza viruses and their antigenic, genetic, and antiviral resistance properties, and provided vaccine composition recommendations, as well as vaccine reassortant viruses and reagents.

The Global Outbreak Alert and Response Network (GOARN) is a partnership of over 190 technical institutions worldwide, coordinated by WHO, to ensure the rapid deployment of international team, and access to technical resources and capacities. WHO issued an alert to GOARN on 24 April, 2009. Over the following months, technical institutions in the network have provided experts, including epidemiologists, laboratory scientists, clinicians, infection prevention and control experts, outbreak logisticians, and communications experts in response to requests for assistance from Ministries of Health and WHO Country Offices. 188 mission deployed to 27 countries were carried out to strengthen national preparedness and response and international operational coordination.

Detailed situation reports of epidemiological information are published weekly and information is shared with countries through the WHO website, *Weekly Epidemiological Report (WER)*, and other publications.

The situation update is derived from a number of different data sources, including reports on Ministries of Health websites, reports submitted by WHO offices, and monitoring of media and other informal data sources. These data are displayed graphically to describe different facets of pandemic progress. In September 2009, WHO developed a new format for weekly data reporting in collaboration with the Geographic Information Systems (GIS) team. This map uses data from FluNet, such as the percentage of specimens tested that are positive for influenza, combined with virological data from national public reports, and assembles this data with epidemiological data to reflect the intensity of transmission of pandemic influenza virus globally. The map also displays virus subtype data using pie charts that overlay the map.

**UNHRC** has initiated intensive surveillance for respiratory illness and death in all of the camps and other areas where they provide services. These surveillance systems have provided regular and timely data on the situation in refugee populations in many parts of the world and have contributed both to response related decision making but also assessment of the impact of the pandemic on some of the most vulnerable populations in the world.

## D2: Reduce transmission through appropriate use of transmission reduction

### *Previously identified needs*

A number of least developed countries requested assistance with strengthening decision making and applications of appropriate measures to reduce transmission of pandemic influenza in the community. Three specific areas of concern featured in these requests (a) appropriate use of school closures to reduce transmission and ways to reduce the negative impact of temporary suspension of education services (b) reducing the risk of transmission associated with travel without negatively impacting on travel, tourism or trade (c) slowing transmission at individual and household level through promotion of good hygiene practices.

### *Progress in meeting these needs*

#### (a) School focused transmission reduction measures

**UNICEF** and **UNESCO** in conjunction with **WHO** have formed a tri-agency task force on school related issues and have drafted guidance on (a) School Closure Policies and (b) Teaching and Learning Guidance. This guidance and lessons learnt will be very valuable in refining the use of school closures in the future so as to maximize its potential benefits on transmission reduction but at the same time minimize the negative impacts related to school closures and class suspensions.

**UNICEF** at country level in all of the least resourced countries has, through various campaigns and efforts (including Global Hand Washing day) distributed H1N1 hygiene message through schools primarily. **UNICEF** has also worked with government counterparts to support the inclusion of H1N1 messaging in education curricula.

**Through its national societies, IFRC** has worked with schools in many of the least resourced countries to support continued education during school closures and to support education on hygiene through schools.

### (b) Travel based transmission reduction measures

**UNWTO** and **ICAO** have worked closely with **WHO** to (a) reduce the impact of the pandemic on travel and tourism (b) to minimise risk for transmission during/as a result of travel. This has been particularly important as international travel – particularly air travel - in the early phase of the pandemic was the main source of transmission between countries.

The **International Civil Aviation Organization (ICAO)** conducted training of public health officers and aviation personnel as part of its Cooperative Arrangement for the Prevention of Spread of Communicable disease through Air travel (CAPSCA) project aimed at reducing the risk of communicable disease being spread by air transport. The project promotes improved preparedness and response in both developing and developed countries, since air travellers may commence their journey in either. The work strives to achieve a globally harmonized approach, bearing in mind the different levels of resources available to governments. Preparedness planning need not be expensive, since communication and collaboration between different stakeholders, rather than provision of costly equipment, is the mainstay of an effective plan in the aviation sector.

**UNWTO**, in conjunction with partners, conducted three international review and preparation exercises to reassess the travel and tourism response, identify gaps, exchange experience, correct assumptions and help ensure that travel and tourism continue to be effectively addressed in the global, regional and national preparations and responses

### (c) Hygiene Programmes

**WHO** has taken leadership in developing technical messages to support adoption of risk reducing behaviours. Through the **UN Communications Group** and other forum work has been undertaken to ensure that the messages from all the UN agencies, the IFRC and NGO partners have been consistent and have reinforced each other.

**All of the UN agencies** have incorporated hygiene messages into as many of their programmes as relevant e.g. **WFP** has developed and promoted hygiene messages and support for lorry drivers, **ILO** has promoted the dissemination of hygiene messages in the work place and the responsibilities of employers as key communicators to support this.

**UNICEF** has actively promoted and supported Hand Washing with Soap (HWWS) campaigns in many of the least resourced countries and the use of schools to support communication of hygiene messages to children and through children to their families and the wider community.

**UNHCR and IOM** have made consistent and ongoing efforts to ensure hygiene messages have been promoted and supported in all of the refuges camps and displaced persons communities that they support.

**IFRC** has reinforced and supported community based hygiene messages and campaigns through its extensive community networks in nearly 100 countries.

It should be noted that in addition to the direct impact on pandemic influenza virus transmission, it has been noted in a number of countries these hygiene messages are having a significant and measurable positive impact on transmission of other diseases particularly diarrheal illnesses. A recent study by **UNICEF** in Bolivia showed that rates of diarrhoeal illness had fallen – most likely as a result of pandemic messaging leading to improved hand hygiene.

### **2.3.6 Objective E: Strengthening Influenza Laboratory Capacity**

#### ***Previously identified needs***

Strong laboratory capacity in countries is essential for detection, monitoring, and controlling pandemic influenza. WHO surveyed the urgent needs and priorities of 62 developing countries. The results revealed that less than one-third of countries have fully functioning NICs and the majority of the laboratories surveyed required some form of assistance in order to ensure that they could perform their diagnostic functions adequately during the pandemic.

#### ***Progress with meeting these needs***

WHO has worked with the 62 least resourced countries to procure critical supplies and equipment to build laboratory capacity. In collaboration with United States Centres for Disease Control (USCDC) primers and probes for detecting the H1N1 virus, as well other essential laboratory consumables and transport equipment have been distributed worldwide.

To date, 1142 diagnostic kits for real-time RT-PCR were shipped to 153 countries and include the following distributions:

<b>AFRO:</b> 93 kits	<b>AMRO:</b> 497 kits
<b>EMRO:</b> 104 kits	<b>EURO:</b> 186 kits
<b>SEARO:</b> 80 kits	<b>WPRO:</b> 74 kits

WHO initiated the rollout of an Action Plan for Influenza Laboratory Capacity Building over the next 12 months. Regional action plans for AFRO, PAHO and EMRO have been prepared and funding from bilateral sources has been secured. Under this plan 37 of the least resourced countries in Africa have received specific financial support for laboratory capacity building (training, equipments and reagents) from USAID and 10 of the least resourced countries in WPRO have received specific financial support from regionally mobilized funds. It is anticipated that 6 of the least resourced countries in the AMRO/PAHO region, 6 in the EMRO region and 10 in the SEARO region will also received specific financial assistance soon.

Two sessions of biosafety level 3 (BSL-3) laboratory hands-on training were organized by WHO. Seventeen participants from National Influenza Centres in developing countries which have or are about to have BSL-3 facilities participated in the training.

### **2.3.7 Objective F: Procurement of additional vaccines**

A number of the least resourced countries as well as some middle income countries expressed an interest in purchasing additional pandemic vaccine to supplement donations or existing supplied.

In December 2009 UNICEF supply division undertook a survey to estimate possible demand and, based on this information, issued a tender to seek interest from manufacturers. In addition, the World Bank made available to eligible countries a support through reprogramming of existing funds or provision of additional loans to pay for pandemic vaccines procured through UNICEF assisted procurement programme.

UNICEF and World Bank are continuing to collaborate on this programme. However it has appeared in recent weeks that demand for these services are declining as least resourced countries begin to receive donations and/or have sought to access vaccines bilaterally.

### **2.3.8 Objective G: Promote Regional Knowledge Sharing**

In the Asia-Pacific region, a number of regional meetings were held in late 2009 in order to coordinate the UNIP process and communication with the countries, and to coordinate the support of various UN agencies to the governments in the region. A **UNSIIC** coordinated regional workshop regrouping all the UNCT's in the region was held in Bangkok in January 2010 to better define and coordinate in-country support and resources and external support needed to support governments.

In the Latin America and Caribbean region, a number of regional conferences and workshops were held. **PAHO** organized an event in September 2009 to update and advise representatives from all countries and territories in the Americas. **ICAO** held a workshop in Peru in December 2009 focused on Aviation Medicine and aviation industry pandemic planning. The **Caribbean Red Cross Societies** held a regional workshop on pandemic preparedness in Trinidad in September 2009. **PAHO** and the United States military held a workshop on pandemic influenza preparedness in Barbados in September 2009. A regional training workshop on influenza was held in Panama in September 2009. Pandemic scenario planning was also included in broader disaster management events held in Jamaica, Panama, El Salvador, Guatemala, Peru and Chile.

In Southern Africa, pandemic preparedness was discussed at a number of regional events for national disaster managers and humanitarian actors in Zimbabwe and South Africa in the Fall of 2009. **ICAO** held a workshop in October 2009 focused on Aviation Medicine and aviation industry pandemic preparedness.

In Western and Central Africa, a series of workshops were held on regional **Civil-Military Pandemic Response planning** with delegates from 20 different African countries as well as the US military. A Regional H1N1 pandemic influenza platform meeting was held in January 2010 in Dakar to exchange information between key actors in the field of pandemic H1N1 influenza. In addition, regional health group meetings are convened on a monthly basis to share information on the spread of and strategies to mitigate a number of epidemiological diseases (including H1N1).

In all regions, experience has consistently shown that regional fora (conferences and workshops, regular meetings of regional bodies, etc.) serve as a particularly effective means of sharing knowledge and information, and of creating closer relationships and cooperation between key actors in disaster management and pandemic readiness and response.

### **2.3.9 Animal Health and Agriculture Sector**

Although assistance with animal surveillance and agriculture sector protection was not granted in the requests for support in September, given the recent findings of pandemic H1N1 in a range of species and the potential for mutations and reassortment events to occur as the virus transmits between species, it has become increasingly important to strengthen animal surveillance at all levels through the production and marketing chain.

**FAO and OIE** have both been providing support to countries with animal surveillance and have provided guidelines for surveillance. In addition, both organizations has played an important role in trying to limit the negative impact on the agriculture sector through effective communications and their support for continued research into this area.

## Section 3: Summary

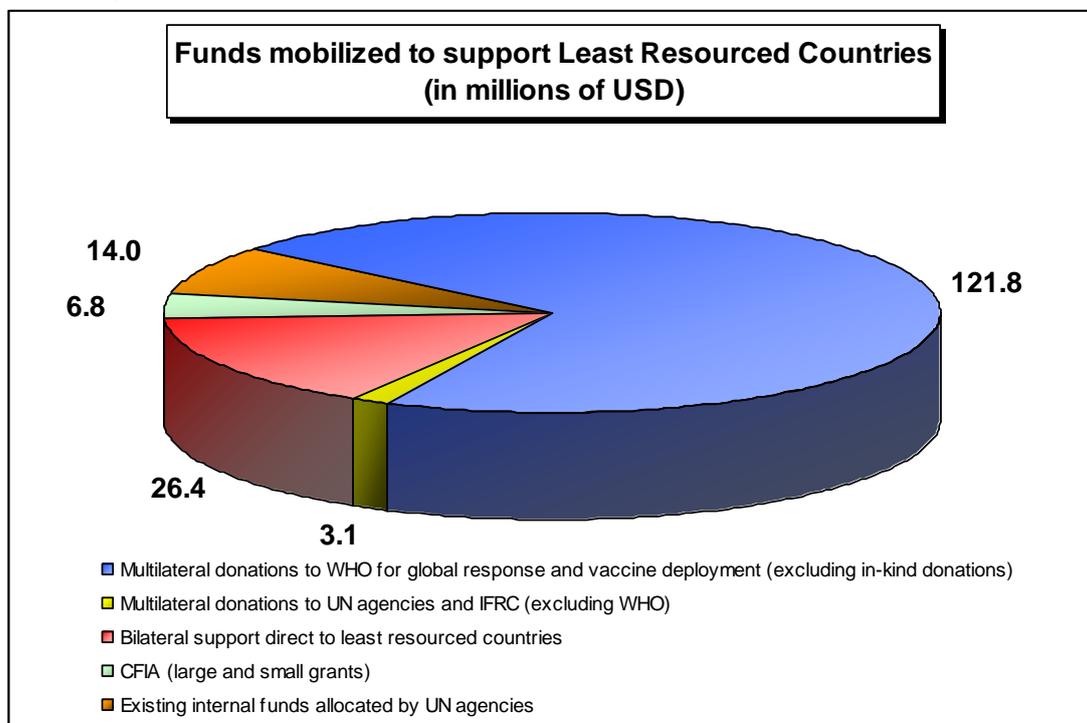
### 3.1 Funding and activities

It is very difficult to calculate the total amount, in monetary terms, of support that has been mobilized to date to assist the least developed countries in meeting the urgent, priority needs that were identified through the UNIP process in July 2009. The figures provided in this section are likely to be an underestimate of the total amount of support as (a) in-kind donations of pharmaceuticals, essential equipment and technical assist has not been costed and (b) it is likely that only a small proportion of the bilateral assistance that has been provided has been captured in this report.

However, this section aims to provide an overview of the types of resources that have been mobilized and how this relates to the needs that were identified in through the UNIP process.

In terms of financial support, as can be seen from chart 1 below, the majority of funds – note that this does not include in-kind donations - that have been mobilized have been provided to WHO to support global response. This is followed by bilateral financial donations to least resourced countries which accounts for around a quarter of all financial support provided to assist least resourced countries to address their urgent needs. The majority of the funds utilized by UN agencies (excluding WHO) to support urgent requests for assistance have been existing agency funds or reprogrammed CFIA funds.

*Chart 1: Funds Mobilized to Support the Least Resourced Countries (excludes in-kind donations)*

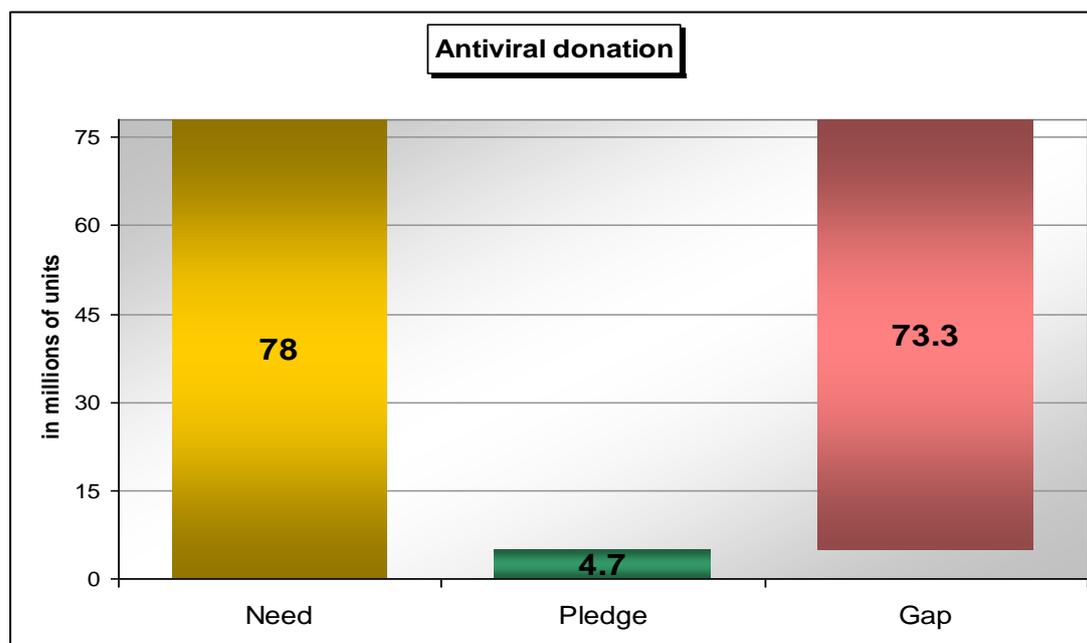


## Category I: Essential Medicines

### *Objective A: Increased access to antivirals to treat severe illness*

Through the UNIP process it was estimated that around 78 million treatment courses would be required. To date 4.7 million courses have been donated and distributed to least resourced countries.

Chart 2: Antiviral donations



### *Objective B: Increased access to essential antibiotics for treatment of patients with bacterial complications*

It was estimated that 39 million treatment courses of antibiotics would be required. To date no donations have been made – nor have any specific requests for urgent supplies been received from least resourced countries

### *Objective C: Increased access to pandemic influenza H1N1 vaccine for use in protecting health care workers and other essential service personnel*

Support for essential medicines, through both in-kind donations ensured that 200 million doses of vaccine have been made available (chart 3). However there is still a shortfall with regards to ancillary supplies (charts 4 and 5) as well as distribution costs (chart 6).

Chart 3: Pandemic Vaccine Donations

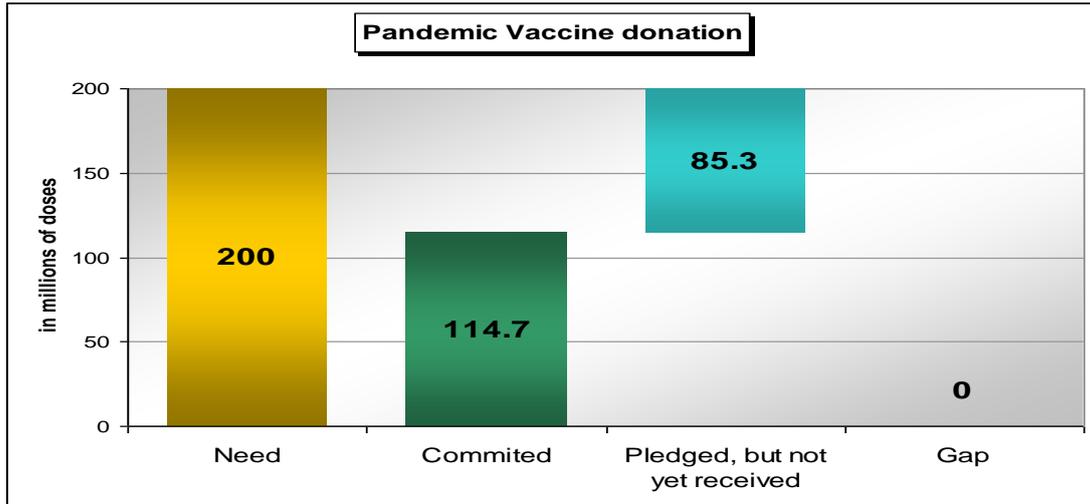


Chart 4: Safety Boxes

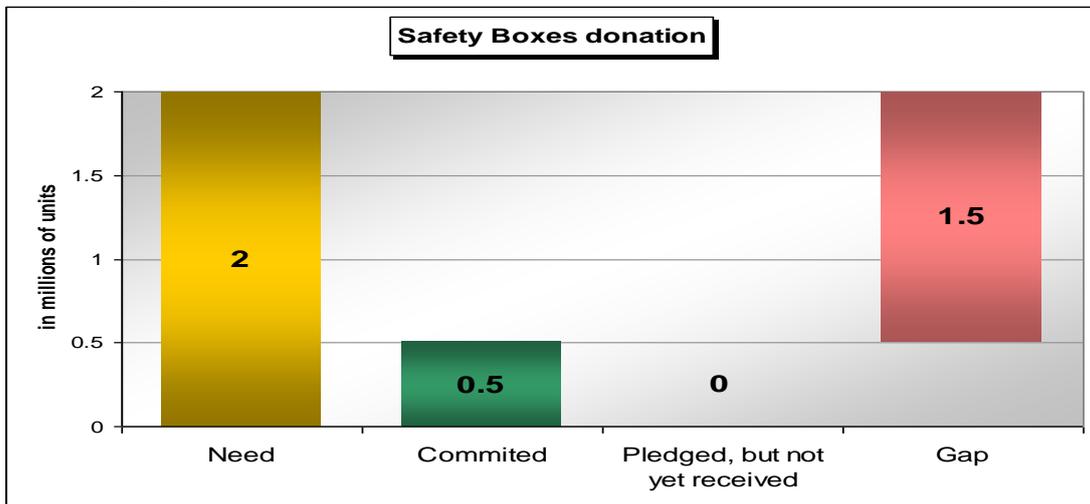
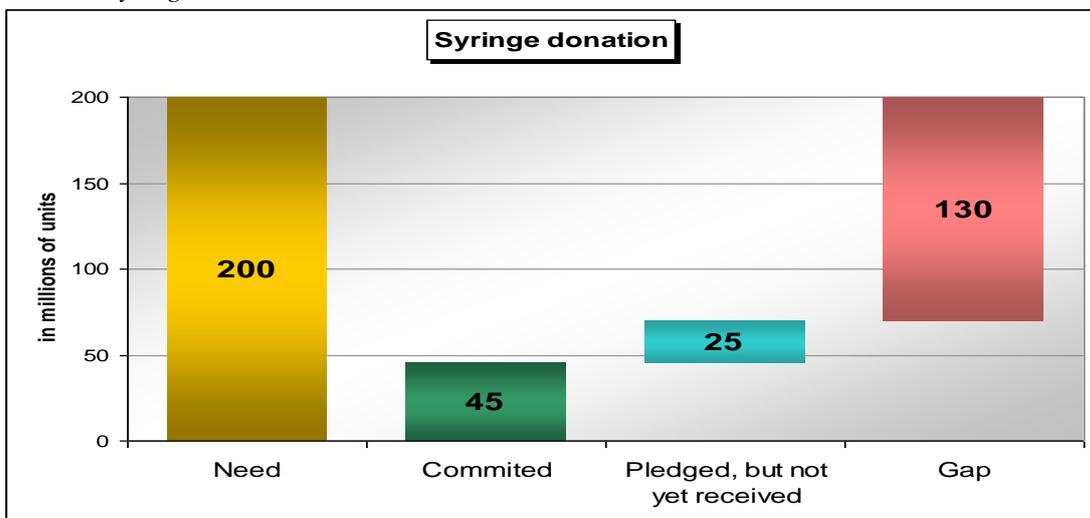
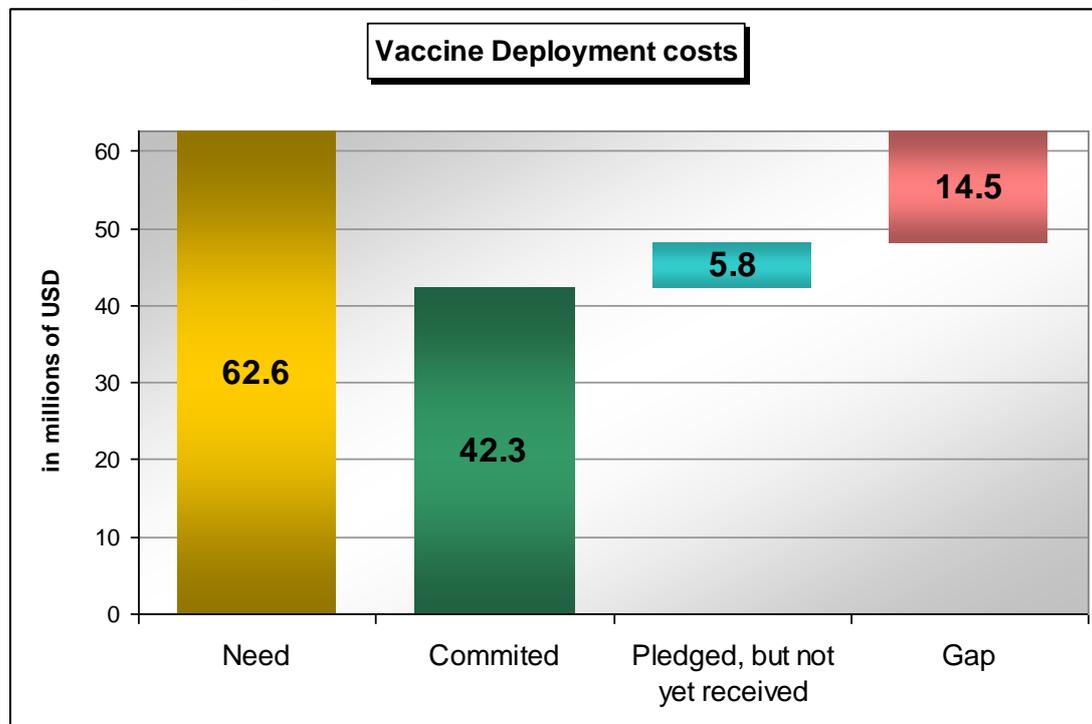


Chart 5: Syringes



More than two thirds of the costs associated with vaccine deployment have been met, whilst the remaining funds have either been pledged (9%), or are still outstanding (23%). These funds are critical to the delivery of donated vaccines on the ground and, therefore, are necessary to achieve the successful completion of the vaccine donation programme.

Chart 6: Vaccine deployment costs



### Category II: Country Readiness

Considerable funding has been made available to support in-country planning for vaccine distribution and post marketing surveillance. This has allowed all potential recipient countries to receive training and some support. As a result 37 countries now have plans in place and additional countries are in the process of finalizing their plans (see annex B for more details).

Significant funding has been made available to support laboratory capacity building. The WHO Action Plan for Influenza Laboratory Capacity Building has been fully funded and the roll out of this plan over the next 12 months is likely to improve influenza laboratory diagnostic capacity in many of the least resourced countries in the world.

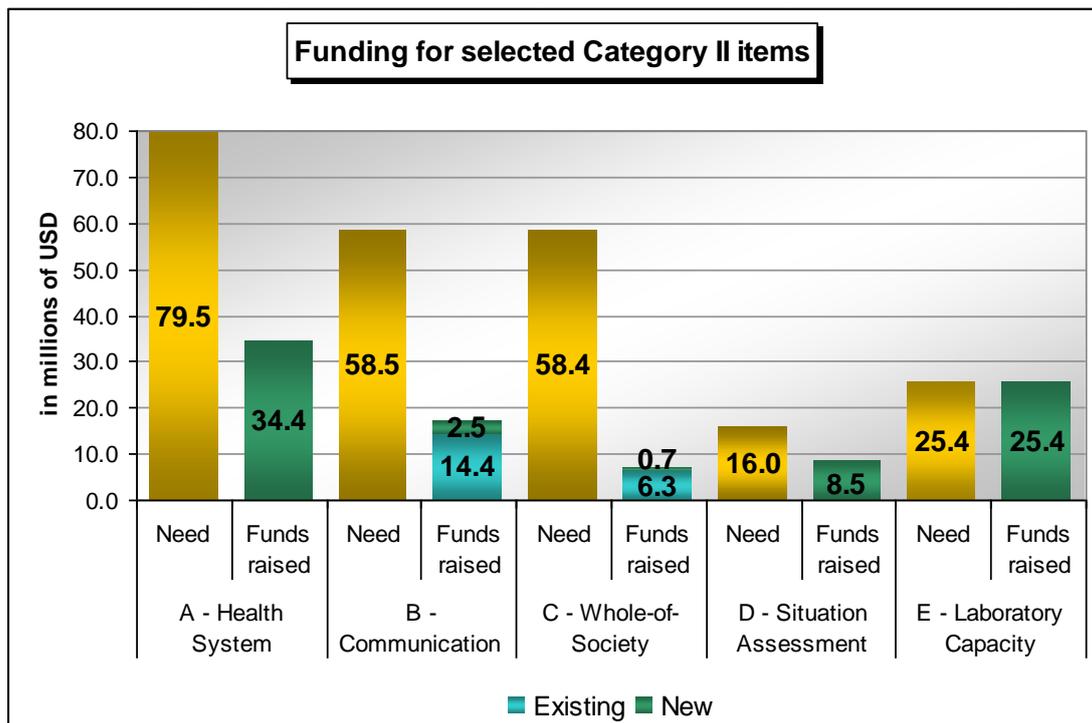
However funding for other areas of country readiness, most notably communications and whole of society preparedness, has been more limited. UN agencies have mobilized existing funds to provide urgent support to governments in these areas and funds received through the CFIA have been refocused to ensure that urgent support for pandemic H1N1 readiness and response could be provided through UN agencies and through small grants allocated to governments via UN Resident Coordinators.

Early evaluations in some countries have shows that this support has helped to support critical non pharmaceutical pandemic H1N1 response. This support has been shown to have improved hygiene standards and as a consequence reduced rates of diarrheal illnesses as well as respiratory illnesses in some countries. In addition, investment in whole of society

preparedness and business continuity planning is likely to reap benefits both in the short term (pandemic related) and in the longer term (all hazards).

The bar chart below summarises the current status of the main Category II items vis-à-vis to the pledged support. The funds that have been raised were classified into new monies and existing cash that has been allocated by UN agencies to address the urgent needs of Least Resourced Countries under Category II. Unlike donations of the pandemic vaccine, which is the main item in Category I, most Category II items remain underfunded, as becomes evident in the graphic below, with the sole exception of Category II.E ‘Strengthening of Influenza Laboratory Capacity’.

Chart 7: Funding to support increased country readiness and non pharmaceutical response\*



\*The following donors did not specify the type of intervention that their monies, partially or in full, would support. As a result, some or all of the following funds could not be assigned to a specific category of support: Germany (\$17.3m), the USA (\$10.07m), Canada (\$5.68m), the Asian Development Bank (\$0.6m) and the UK (\$0.41m).

### **3.3 Progress Towards Meeting the Targets Proposed in the September Report**

Table 7 below provides an update on progress towards meeting the targets for support to least resourced countries that was proposed in the September Report.

WHO reports that expected progress is being made to meet all the health sector related targets.

PIC/OCHA reports that some progress has been made in those countries requesting support such that (a) 75% of countries have now completed rapid assessments of vulnerabilities (b) 30% of countries have developed further their plans to ensure continuity of services during a pandemic.

UNICEF reports that 55 of the least developed countries (i.e. all that have requested this type of assistance to date) are receiving some assistance with planning, developing, distributing and evaluating communications materials and media campaigns. However not all requests for assistance can currently be funded and with the now rapid roll out of the vaccine programme, there is an outstanding need for additional funds to ensure that effective communications to accompany the vaccine programme can be supported.

**Table 7: Progress Towards Meeting Targets**

Implementation of support packages under each objective	Expected Contribution to Overarching Goals			Target(s)	Status as of 1 <sup>st</sup> February 2010
	1. Reduced excess mortality	2. Increased societal resilience	3. Enhanced ongoing capacity building for health security		
A: Strengthened health system response to pandemic influenza (H1N1), including operational planning for mass vaccination campaign	Effective health care planning will assist with surge management and strengthen the system's ability to continue to maintain essential non influenza services. Both surge management and business continuity for non influenza services will assist in reducing otherwise avoidable deaths.	A functioning health care system is vital for social stability. Health service planning can also assist other sectors in understanding inter-dependencies and in prioritization and planning. Effective planning is also needed to deliver vaccine to health care workers and other essential workers.	Planning to meet a sudden surge in demand is extremely important for coping with any sudden health shock. It is likely that this urgent work will result in longer term benefits that would be applicable across a range of contingencies	A1. 80% of countries requesting assistance in this area to have fully operational health care plan in place by 6 months, 100% by 12 months.  A2. All countries to have fully operational pandemic vaccination plan in place by 3 months.	A1. WHO is responding to requests and providing operational support as necessary  A2. Pandemic vaccination plan approval processes are progressing as expected
B: Strengthened communications for pandemic influenza (H1N1)	Effective communications about the risks, how to protect yourself and your community and when to seek medical care will be important in ensuring adequate response and in helping to reduce mortality	Effective communications about the risks, resource allocations and addressing stigma are vital for social stability	Effective communications are needed for any health shock or emergency. Capacity building in real time and during a crisis is likely to lead to long term strengthening of communications capacity and a 'reusable' system	B1. All countries requesting this assistance to have fully operational communications plan in place by 6 months.  B2. In all countries requesting assistance, 80% of target population to have	Following the emergence of the Pandemic (H1N1) 2009, UNICEF and WHO, on the basis of available scientific information and evidence, jointly identified key behavioral interventions for reducing the transmission and impact of the virus. These interventions focus on control measures at the individual and family levels. Its

				<p>received key messages by 6 months.</p>	<p>public health goal is to reduce transmission, morbidity and mortality related to Pandemic (H1N1) 2009 virus among people who are well, who are sick and who are caring for the sick. UNICEF and WHO are currently developing an online survey targeting country level staff involved in external communication, behavior and social change communication, social mobilization related to the Pandemic (H1N1) 2009 response to assess its effectiveness, utilization and recommended improvements.</p> <p>UNICEF global, regional and country offices have mobilized resources and capacities to support 55 countries to design, produce and disseminate H1N1 communication materials directed to households, health facilities and schools. Some of these countries undertook intensive mass media campaigns to promote the adoption of protective behaviours</p>
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<p><b>C: Strengthened whole of society and humanitarian readiness</b></p>	<p>Lack of functioning in any critical sector is likely to lead to an increase in excess mortality, socioeconomic damage and potential humanitarian consequences. Effective planning and rapid implementation of contingency measures will reduce the risk of this occurring.</p> <p>Strengthening the readiness of humanitarian actors to deliver humanitarian assistance (should H1N1 escalate to the point where it gives rise to additional humanitarian needs) will enable humanitarian actors to minimise mortality and morbidity.</p>		<p>Capacity building in this area will lead to improvements over the long term in preparedness and response to any sudden shock to a country.</p> <p>Strengthening humanitarian planning will boost the capacity of governments, agencies and partners to tackle a range of possible future emergencies</p>	<p>C1. All countries requesting assistance will have performed multi-sector vulnerability assessment within 3 months</p> <p>C2. All countries requesting assistance will have developed plans to ensure continuity of service in the highest priority/most vulnerable sectors by 6 months</p> <p>C3. Humanitarian needs occasioned by H1N1 effectively addressed</p>	<p>C1. PIC/OCHA developed a tool to help UNCT's to work with government counterparts to undertake rapid assessments. The 41 countries which prioritised multi-sector support have been invited to undertake such assessments. PIC estimates that 75% of the 41 countries will have undertake these assessments by end of February 2010.</p> <p>C2. Lack of funding has limited progress. If prospective new funds are confirmed, PIC estimate that this will help 60% of the 41 countries to develop some priority plans, but such planning may take a further 6 months to complete. In the meantime, progress has been made in 30% of the 41 countries using existing resources.</p> <p>C3. To date no humanitarian needs have been occasioned by H1N1</p>
<p><b>D: Strengthened situation</b></p>	<p>Situation monitoring, if linked to decision making,</p>	<p>Situation monitoring, if</p>	<p>Capacity building in this area is likely to</p>	<p>D1. All countries requesting assistance</p>	<p>D1. WHO guidance developed and provided, other support</p>

<p><b>assessment and public health decision making</b></p>	<p>assists in the early detection of events to ensure that the most appropriate interventions to reduce mortality can be effectively implemented.</p>	<p>linked to decision making, assists in the early detection of events to ensure that the most appropriate interventions to increase societal resilience can be effectively implemented</p>	<p>result in increased ability to detect and respond quickly to events of potential public health concern in the future</p>	<p>to have a functioning system to collect and report critical information by 6 months</p> <p>D2. All countries requesting assistance to have adapted and disseminated decision support tools for public health interventions by 6 months</p>	<p>provided as necessary</p> <p>D2. WHO reports that progress is being made as expected</p>
<p><b>E: Strengthened influenza laboratory capacity</b></p>	<p>Rapid detection and accurate diagnosis of unusual events, such as development of antiviral resistance and viral evolution, assists with rapid response and more effective implementation of interventions that could reduce mortality.</p> <p>Biosafety is critical to reduce risks to laboratory workers and prevent laboratory associated transmissions</p>	<p>Indirect impact through improved response and providing information for communications</p>	<p>Capacity building in this area will lead to increased ability to detect a range of organisms that use similar techniques to those used for influenza detection.</p> <p>As the same biosafety procedures are used for a very large range of organisms, capacity building in this area will lead to improved standards for all laboratory services</p>	<p>E1. All countries requesting assistance to have moved one step on the WHO influenza capacity scale within 12 months</p> <p>E2. Regional laboratories able to continue to provide their national and regional activities despite surge in demand</p> <p>E3. All countries requesting assistance</p>	<p>E1. WHO activities progressing as expected and guidance provided as requested</p> <p>E2. WHO continues to provide support as requested and progress has been made as planned</p> <p>E3. WHO continues to provide support as requested and</p>

				to have reached minimum biosafety standards within 6 months	progress has been made as planned
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## ANNEX A: WHO H1N1 Resource Mobilization: An Overview

### World Health Organization global pandemic response plan

WHO headquarters and regional offices collaborated on a *WHO influenza A (H1N1) global pandemic response plan*. This comprises six strategic actions which WHO is coordinating and taking to mitigate the impact of the pandemic by strengthening the readiness and response capacity of countries and communities, particularly throughout the world's most vulnerable regions. The six main actions are:

- Monitoring and tracking the progression, transmission and impact of the disease;
- Generating scientific, evidence-based knowledge and rapidly sharing the information to support national and international assessment, response and mitigation efforts;
- Providing accessible guidance and direct technical assistance to countries, particularly in vulnerable regions, for capacity strengthening and field support;
- Facilitating and accelerating the availability and access of countries to quality vaccines;
- Facilitating and accelerating the availability and access of countries to antivirals; and;
- Providing global health leadership and supporting effective regional and global collaboration across sectors.

In response to the current outbreak situation, WHO established the Public Health Emergency Fund, a pooled fund which is managed by the Director-General's Office of WHO. All contributors will be provided with a consolidated technical and financial report detailing the implementation of all funds received.

The purpose of this pooled fund is to directly enable WHO to conduct intensified activities to respond to and mitigate the current outbreak situation in accordance with the WHO Influenza A (H1N1) Response Plan. It is important to note that the main objective of the pooled Public Health Emergency Fund is to strengthen and support a coordinated organization-wide response which includes the global and regional activities. It is WHO's priority to scale up the readiness of developing countries to respond, especially in the world's most vulnerable regions.

### World Health Organization pandemic vaccine deployment initiative

In June 2009, the World Health Organization (WHO) declared the first influenza pandemic in 40 years. There are many elements needed to respond effectively to the H1N1 pandemic, such as education and communications, but one of the most effective ways to protect people from developing severe disease from pandemic infection is by vaccinating populations at risk. The currently estimated global manufacturing capacity for pandemic vaccines is at most 3 billion doses per year which is insufficient to vaccinate the world's population. Access to the vaccine will vary among countries. The countries least able to access vaccine include the poorest countries but also some middle income countries. The Secretary General of the United Nations (UN) and the Director-General of WHO called upon the international community for solidarity and assistance to ensure more equitable distribution of pandemic vaccine.

### The need for H1N1 pandemic vaccines

With donors, governments and other UN agencies, WHO is providing countries with options for interventions that can be tailored to support country efforts to mitigate the effects of the H1N1 pandemic. This includes directly providing some resources, such as antivirals, antibiotics and vaccines. It also includes strengthening urgently needed country capacity for essential activities, such as surveillance, patient care and risk communication – as well as long-term support to build vaccine manufacturing capacity. As part of this array of

interventions, WHO is supplying the H1N1 vaccine to developing countries. The goal of WHO is to attain complete coverage with pandemic vaccines, so that everyone who needs the H1N1 vaccine has access to it. Some manufacturers and country donors have responded to the call for vaccines by committing 10% of their production for developing countries. The following tables summarize the overall funding situation (cash contributions) for WHO H1N1 Pandemic Response both under the global response plan as well as vaccines deployment plans. To date, WHO has received a total of **US\$ 116 million** for both the WHO global response plan and WHO H1N1 pandemic vaccine deployment to developing countries.

Total funding raised by WHO for <b>global response plan</b>	\$68,096,731	59%
Total funding raised by WHO for <b>vaccines deployment</b> global operations	\$48,000,000	41%
<b>Grand Total Funding raised by WHO for both global response and vaccines deployment</b>	<b>\$116,096,731</b>	<b>100%</b>

**DIRECT DONOR FUNDING CONTRIBUTION TO THE WHO H1N1 PANDEMIC RESPONSE**

DONORS	DONOR AREAS OF SUPPORT	AMOUNT IN US DOLLARS (including PSC)
Australia	Support WHO regional office to H1N1 pandemic as part of APSED strategy and to support WHO Global Pandemic response and vaccine deployment through pooled Public Health Emergency Funds(PHEF)	\$5,864,363
Belgium	Support WHO PHEF	\$145,349
Canada	Support WHO H1N1 Pandemic Influenza interventions	\$5,676,335
DFID	Support the implementation of WHO PHEF and to support H1N1 vaccines deployment initiatives and support to developing countries for in-country planning	\$18,237,232
The Gates Foundation	Support WHO vaccines deployment initiatives and support developing countries for in-country planning	\$5,654,305
Germany GTZ	Support the implementation of WHO Global Response Plan and Vaccines deployment initiatives including support developing countries to cope with pandemic	\$22,673,192
Japan	Support WHO H1N1 vaccines deployment initiatives and in-country planning	\$10,800,000
New Zealand	Support implementation of WHO H1N1 vaccines deployment initiatives and in-country planning	\$583,380

Norway	Support implementation of WHO global response plan through contribution to WHO PHEF and support WHO H1N1 vaccines deployment initiatives	\$5,952,233
Slovenia	Support the implementation of WHO H1N1 vaccines deployments in developing countries	\$25,602
Sweden	Support the implementation of WHO H1N1 Global Response Plan in particular support to developing countries	\$1,451,379
Switzerland	Support WHO Global Response Plan to H1N1 Pandemic and vaccines deployment initiatives	\$4,995,005
USA (CDC, USAID)	Support the implementation of WHO Global Response Plan to H1N1 pandemic - support regional laboratory capacity - surveillance - clinical management - vaccine deployment global operations	\$38,708,119
Various Donors	Support WHO Regional Offices to cope with H1N1 Pandemic including vaccines deployment and in-country planning operations	\$1,006,572
<b>GRAND TOTAL</b>		<b>US\$121,773,066</b>

### WHO In-Kind Contributions

In addition to the cash contributions, WHO has received the following in-kind contributions:

<b>IN-KIND CONTRIBUTIONS FOR H1N1 (ESTIMATES)</b>		
<b>DONORS</b>	<b>AREAS OF SUPPORT</b>	<b>AMOUNT IN US DOLLAR (including PSC)</b>
<b>NORWAY</b>	<b>Vaccine shipment operations</b>	<b>\$134,630</b>
<b>ROCHE</b>	<b>Donation of antivirals</b>	<b>\$84,000,000</b>
<b>GSK</b>	<b>Donation of vaccines</b>	<b>\$136,361,717</b>
<b>CSL</b>	<b>Donation of vaccines</b>	<b>\$11,271,000</b>
<b>BD</b>	<b>Donation of vaccines</b>	<b>\$1,250,000</b>
<b>TOTAL Value</b>		<b>US\$233,017,347</b>

## H1N1 Pandemic Vaccine Deployment Update - 01 March 2010



World Health Organization

### Background information

To help countries protect people from developing severe disease from pandemic influenza H1N1 infection, the World Health Organization (WHO) is coordinating the distribution of donated pandemic influenza vaccine to 95 countries. This document is an update on efforts to mobilize resources, ensure a sufficient supply of prequalified vaccines, support country readiness and deploy vaccines and ancillary products to countries.

### Mobilizing resources

Governments, foundations and manufacturers have offered contributions of vaccines, ancillary products (such as syringes and safety boxes) and finances to support the donation initiative.

#### Current situation

WHO has received pledges of approximately 200 million doses of vaccine, 70 million syringes and US\$48 million for operations.

#### Overview of resource mobilization (millions)

Resource	Need	Pledge <sup>1</sup>	Committed <sup>2</sup>	Gap <sup>3</sup>
Vaccines (doses)	200	200	114.7 <sup>4</sup>	n/a
Syringes	200	70	45	130
Safety boxes	2	0.5	0.5	1.5
US\$ (global)	62.6	48.1	42.3	14.5
US\$ (in-country)	In most cases, countries require resources to deploy vaccines in the country and conduct vaccination campaigns. The precise financial needs and available resources are currently being identified and gaps in funding will be reported in future updates.			

<sup>1</sup> Not all pledged vaccines will be available for the 2010 donation initiative.

<sup>2</sup> As per signed agreements with donors.

<sup>3</sup> Is equal to the difference between needs and pledges.

<sup>4</sup> Australia, Belgium, CSL Ltd., France, GSK SA, MedImmune, Norway, Sanofi Pasteur SA, USA.

### Preparing countries to receive vaccines

WHO and partners are assisting all 95 countries to receive and use vaccines. Before countries receive donated vaccines, they complete three steps: 1) request donated vaccines, 2) sign an agreement accepting the terms and conditions of support and 3) develop a national vaccine deployment plan.

#### Current situation (95 countries)

- 92 of the 95 countries have requested vaccine donations.
- 59 countries have signed agreements with WHO.

#### Progress of National Deployment Plans

Stage of preparation	Number of countries of 95
Complete and final	37
Being refined - expected in Q1 2010	6

### Supplying vaccines to countries

After a country meets the criteria for receiving donated pandemic vaccine, WHO deploys donated vaccines to the country.

#### Current situation

WHO with partners has delivered vaccines<sup>6</sup> to the following countries and is preparing to supply several others:

#### Completed Vaccine Deliveries (January - February)

Country	Number of Doses	Arrived in country <sup>7</sup>
Afghanistan	500,000	22 February 2010
Azerbaijan	172,000	08 January 2010
Laos	600,600	25 February 2010
Mongolia	100,000	07 January 2010
Nauru	1000	27 February 2010
Papua New Guinea	700,000	26 February 2010
Togo	132,000	27 February 2010
<b>Total</b>	<b>2,205,600</b>	

<sup>6</sup> All donated vaccines are bundled with AD syringes and safety boxes.

<sup>7</sup> Date is for latest arrival in cases of multiple shipments.

#### Planned Vaccine Deliveries (March)

Country	Doses	Country	Doses
Bangladesh	3,000,000	*Nigeria	2,880,000
Bhutan	65,000	Niue	200
Cook Islands	2000	*Pakistan	3,100,000
*Cuba	1,124,000	Paraguay	120,000
*DPR Korea	476,000	Philippines	1,900,000
*El-Salvador	136,000	Samoa	18,000
Fiji	88,200	Senegal	240,000
Guatemala	260,000	Solomon Islands	55,000
Honduras	140,000	*Sri Lanka	385,000
*Kenya	730,000	Suriname	50,000
Kiribati	10,000	Tokelau	200
Kosovo	100,000	Tonga	10,000
Kyrgyzstan	150,000	Tuvalu	1000
Maldives	31,200	Vanuatu	25,000
*Nicaragua	110,000		
<b>Total</b>		<b>15,206,800</b>	

\*Vaccine is in preparation for shipment pending regulatory or other outstanding clearance.

**Prequalification of pandemic vaccines** WHO only supplies vaccines that have been reviewed by a team of WHO experts and deemed to meet international quality standards.

To date 9 pandemic influenza A (H1N1) vaccines from the following manufacturers have been prequalified: GlaxoSmithKline Biologicals SA (2); Sanofi Pasteur SA (2); Novartis AG (3); CSL Ltd. (1); MedImmune USA (1).

8 other pandemic influenza A (H1N1) vaccines are currently in the pipeline for prequalification: Green Cross Korea (2), Serum Institute of India (2), Baxter Austria (1), Panacea (1), Sanofi France (1), Zydus Cadila India (1).

More details are available at: [http://www.who.int/immunization\\_standards/vaccine\\_quality/pq\\_system/en/](http://www.who.int/immunization_standards/vaccine_quality/pq_system/en/)