

**Pandemic Preparedness Summary Checklist  
For Save the Children Country & Field Offices  
March 27, 2014<sup>1</sup>**

An influenza pandemic occurs when an influenza A virus new to humans acquires the ability for sustained person-to-person (P2P) transmission and spreads around the world. Since the 16<sup>th</sup> century, influenza pandemics have been described at intervals ranging between 10 and 50 years, with varying severity. While the 1918 pandemic, which is believed to have evolved from an avian virus, is estimated to have killed 50 to 100 million people,<sup>2</sup> the 2009 “swine flu” pandemic was very much milder.

From late 2003 through 25 February 2014, 658 laboratory-confirmed human cases of avian influenza A(H5N1) were officially reported to WHO from 16 countries (including 39 cases from 7 countries in 2013), with 59% of these cases resulting in death.<sup>3</sup> Potential evolution of this virus into one capable of sustained P2P transmission has been a concern over the last decade.<sup>4</sup> However, since November 2012, we have witnessed an important evolution in terms of current threats (which we know about) of a potentially severe pandemic involving P2P respiratory transmission.

We have been following news of the Novel Coronavirus (MERS-CoV) since WHO’s first report in November 2012 of clusters of cases. MERS is not an influenza virus, but related to other coronaviruses which cause SARS and the common cold. This virus had never been detected in humans before. Bats or camels (rather than birds) may be the animal reservoir, but the animal or environmental source of human infection remains uncertain. From September 2012 through March 26, 2014, WHO was informed of 200 laboratory-confirmed cases from 11 countries, with a case fatality ratio among confirmed cases of 42%. Most cases have been reported by Saudi Arabia, and all cases have had a link to the Middle East. WHO notes that, “we have now seen multiple clusters of cases in which human-to-human transmission has occurred. . . . . Thus far, no sustained community transmission has been observed.”<sup>5</sup>

Since March 31, 2013, we have been following an outbreak of H7N9 avian flu in eastern China, which has involved a first wave of 133 cases through May,<sup>6</sup> and an ongoing second wave, reaching a total of 401 cases on March 25, with a case fatality ratio among confirmed cases of approximately 30%.<sup>7</sup> This virus had never been detected in humans before. Live poultry markets have been implicated as a source of transmission to humans, even though (unlike H5N1) H7N9 is not causing signs of illness in poultry. The European CDC recently noted that, “the continued and increasing transmission of a novel reassortant avian influenza virus capable of causing severe disease in humans

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<sup>2</sup> Taubenberger JK, Morens DM. 1918 Influenza: The Mother of All Pandemics. *Emerg Infect Dis* 2006;12:20: <http://wwwnc.cdc.gov/eid/article/12/1/pdfs/05-0979.pdf>

<sup>3</sup> [www.who.int/influenza/human\\_animal\\_interface/en/](http://www.who.int/influenza/human_animal_interface/en/)

<sup>4</sup> Influenza Research at the Human and Animal Interface: Report of a WHO Working Group, September 2006: [www.who.int/csr/resources/publications/influenza/WHO\\_CDS\\_EPR\\_GIP\\_2006\\_3C.pdf](http://www.who.int/csr/resources/publications/influenza/WHO_CDS_EPR_GIP_2006_3C.pdf)

<sup>5</sup> [http://www.who.int/csr/disease/coronavirus\\_infections/en/index.html](http://www.who.int/csr/disease/coronavirus_infections/en/index.html)

<sup>6</sup> <http://www.flutracker.com/forum/showpost.php?p=489904&postcount=1>

<sup>7</sup> <http://www.cidrap.umn.edu/infectious-disease-topics/h7n9-avian-influenza>

in one of the most densely populated areas in the world is a cause for concern due to the pandemic potential.”<sup>8</sup>

These three current threats have several things in common, including:

- Apparent high case fatality (high mortality among confirmed cases).
- Limited P2P transmission among close contacts is likely to have occurred in clusters of cases with all three of these viruses (particularly H5N1 and MERS), but thankfully, so far, efficient / sustained P2P transmission has not been observed.
- Concern that all three of these are RNA viruses which could potentially evolve into viruses capable of efficient / sustained / community P2P transmission by respiratory means, and potentially retain some of their current apparent high lethality.
- Likely unavailability of vaccine or antiviral treatment for much or all of the world’s population during at least the first several months of any pandemic.
- Likely important roles and similar content in a severe pandemic of home care for the ill, non-pharmaceutical interventions (NPIs) to slow transmission, and measures for continuity of key services.

The risk of onset of a severe pandemic in the next year, or in the next decade, can not be quantified. However, a severe pandemic involving P2P respiratory transmission is considered by leading organizations to be an important global threat. For example, the World Development Report 2014 notes that “a severe flu pandemic could more than double the total burden of disease” and “trigger a global recession,” and that, “pandemics are an undermanaged risk. Pandemic prevention and preparedness tend to be sidelined, especially in the health sector, where the responsibility often rests.”<sup>9</sup>

Due to substantial concerns over the threat posed by the H5N1 virus, Save the Children began substantial efforts at preparedness in 2005, focusing on three priorities:

- The health and safety of SC staff and their families;
- Continuity of key SC business and services (eg. business continuity planning); and
- Mitigating the consequences of a severe pandemic in the communities in which we work around the world: Working with local partners to prepare and effectively implement interventions at family and community levels to reduce flu transmission, care for the ill, support continuity of key public health and humanitarian services, and address the needs of children.

Recommended guidance was posted on the SC/US external and SaveNet Influenza and Pandemic Threats web pages in early 2006, and has been regularly updated ever since. Much of the information on these sites is relevant to pandemic threats from respiratory viruses beyond the H5N1 virus. Some of the guidance also applies to seasonal influenza (as noted). More recently, important links on pandemic threats have also been included on the SC/International OneNet site.

- **SC/US external** site: [www.savethechildren.org/publications/technical-resources/avian-flu/](http://www.savethechildren.org/publications/technical-resources/avian-flu/)
- **SC/US SaveNet**: <https://savenet2.savechildren.org/op/ip/gss/Pages/AvianFluUpdates.aspx>
- **SCI OneNet**: <https://onenet.savethechildren.net/sci/security/Pages/pandemic-threats.aspx>

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<sup>8</sup> <http://ecdc.europa.eu/en/publications/Publications/communicable-disease-threats-report-25-jan-2014.pdf>

<sup>9</sup> [http://siteresources.worldbank.org/EXTNWDR2013/Resources/8258024-1352909193861/8936935-1356011448215/8986901-1380046989056/07a--Spotlight\\_7.pdf](http://siteresources.worldbank.org/EXTNWDR2013/Resources/8258024-1352909193861/8936935-1356011448215/8986901-1380046989056/07a--Spotlight_7.pdf)

## Most Important External Sites for News & Guidance

- [www.who.int/csr/don/](http://www.who.int/csr/don/) **WHO Global Alert & Response** (WHO posts on disease outbreaks, with links to pages on H5N1, H7N9, MERS, etc.)
- <http://ecdc.europa.eu/> **European CDC**
- [www.cidrap.umn.edu/cidrap/](http://www.cidrap.umn.edu/cidrap/) **CIDRAP**, Univ. of Minn.
- <http://wwwnc.cdc.gov/travel/notices> **US CDC**
- [www.flu.gov/](http://www.flu.gov/) **US Department of Health & Human Services**

## Key Official Guidance on Public Health Interventions

- [www.cdc.gov/nonpharmaceutical-interventions/index.html](http://www.cdc.gov/nonpharmaceutical-interventions/index.html) **US CDC pages on NPIs**
- <http://www.cdc.gov/nonpharmaceutical-interventions/guidance/index.html> Interim Pre-Pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the U.S. - Early, Targeted, Layered Use of **Nonpharmaceutical Interventions**, **US CDC**, Feb. 2007 (10 MB, also at: [http://www.flu.gov/planning-preparedness/community/community\\_mitigation.pdf](http://www.flu.gov/planning-preparedness/community/community_mitigation.pdf))
- [http://ecdc.europa.eu/en/publications/Publications/0906\\_TER\\_Public\\_Health\\_Measures\\_for\\_Influenza\\_Pandemics.pdf](http://ecdc.europa.eu/en/publications/Publications/0906_TER_Public_Health_Measures_for_Influenza_Pandemics.pdf) Guide to **public health measures** to reduce the impact of influenza pandemics in Europe –‘**The ECDC Menu**,’ European CDC, Sep. 2009
- [www.who.int/influenza/resources/documents/community\\_case\\_management\\_flipbook/en/index.html](http://www.who.int/influenza/resources/documents/community_case_management_flipbook/en/index.html) Community case management during an influenza outbreak: A **training package for community health workers**, **WHO**, 2011 (includes family-level NPIs & home care)
- [www.cdc.gov/flu/homecare/](http://www.cdc.gov/flu/homecare/) The Flu: **Caring for Someone Sick at Home**, **US CDC**.

## Summary Preparedness Checklist of Priority Actions for SC Country & Field Offices<sup>10</sup>

Action	Comments / Resources	Persons Responsible & Current Status
<b>I. Overarching actions</b>		
1. Influenza Point Persons (IPPs) in each office	Trusted health professionals (& back-ups in case primary IPPs are out of office) appointed & oriented to advise staff, SMT, etc. See <a href="#">Influenza Point Persons Roles and Responsibilities</a> on SaveNet & SC/US external site.	(SMT / CODs)
2. Pandemic Preparedness Plans (PPPs) updated	Pandemic Prep. Plans should address a range of severity (case fatality) scenarios, & should be an annex of the Emergency Preparedness Plan.	Influenza Point Persons (IPPs)
3. Coordination of plans & actions with local partners	Coordination of planning & response with local government, UN agencies, Red Cross/ Red Crescent, NGO partners, etc.	(IPPs)

<sup>10</sup> Updated summary, based on the matrix in: Avian & Pandemic Influenza Planning Assumptions, & Westport / Washington Summary Preparedness Matrix, Influenza Working Group, Save the Children (US) December 12, 2007 Working Draft (at [www.savethechildren.org/publications/technical-resources/avian-flu/](http://www.savethechildren.org/publications/technical-resources/avian-flu/) & <https://savenet2.savechildren.org/op/ip/gss/Pages/AvianFluUpdates.aspx>) Please see this document for further details.

<b>II. Health of SC staff &amp; their families</b>		
4. Staff orientation & Q&A sessions	Incl.: High risk groups, transmission, prevention, symptoms, home care, care seeking, & preparedness at home (based on WHO, CDC, ECDC, & documents for all staff on SC sites)	(IPPs)
5. Written guidance for staff & their families	As above, & promotion of healthy practices in the office, incl. ill staff staying home, hand washing, & respiratory etiquette.	(IPPs)
6. Plans for further guidance & action in a severe wave	Including actions to help protect high risk staff, active screening of staff arriving at work, reducing office crowding/ meetings, office layout to reduce exposure, risk of using public transport for commuting to/from work, working from home, office closure, travel & relocation guidance, etc.	(IPPs, SMT, Global Safety & Security, IT, Facilities & Services)
7. Travel guidance	See guidance on SC sites	(Global Safety & Security, IPPs)
8. Staff relocation / stay in place	See guidance on SC flu sites	(SMT)
9. Arrangements with local health care providers	Services for staff/ families, including seasonal & pandemic flu immunization (if/ when available)	(HR, IPPs)
10. Flu-related supplies for SC offices / staff	PPE for SC staff who are health care providers & supplies for offices, incl. supplies for hand washing. (See guidance on SC flu sites)	(Facilities & Services, IPPs)
11. Staff at higher risk of severe illness (those pregnant or with underlying health conditions)	Consider specific guidance to encourage pandemic & seasonal flu immunization, prompt care seeking for illness with flu-like symptoms, & (particularly in a severe wave) other measures to reduce risk of infection.	(IPPs)
12. Staff with special needs	Incl. guidance for those who speak other languages.	(IPPs)
<b>III. Mitigate the consequences of a severe pandemic in the communities in which we work</b>		
13. Health-related programming with partners, incl. reducing transmission at family level & home care.	See section on program response on SC/US sites: <a href="http://www.savethechildren.org/publications/technical-resources/avian-flu/">www.savethechildren.org/publications/technical-resources/avian-flu/</a> & SaveNet, & CORE website: <a href="http://www.coregroup.org/our-technical-work/initiatives/h2p">www.coregroup.org/our-technical-work/initiatives/h2p</a>	(IPPs)
14. Work with local partners to address needs of children.	<a href="http://www.flu.gov/professional/school/index.html">www.flu.gov/professional/school/index.html</a> , <a href="https://savenet2.savechildren.org/op/ip/gss/Documents/Flu_Kids.pdf">https://savenet2.savechildren.org/op/ip/gss/Documents/Flu_Kids.pdf</a>	(IPPs, Education Sector)
<b>IV. Continue key SC business &amp; services</b>		
15. Departmental / office Business Continuity Plans updated	Incl. plans for increased staff absence (due to illness, care of ill family members, & children home from school/ child care), staff working from home, & office closure in a severe wave.	(SMT, CODs)
16. IT guidance on working from home	See guidance on SC flu sites from IT	(IT)
17. Guidance & benefits related to absenteeism	See guidance on SC flu sites from Human Resources	(HR)

