

National Healthcare Preparedness Programs (NHPP)

Fall 2013



The Department of Health and Human Services, Assistant Secretary for Preparedness and Response (HHS/ASPR), National Healthcare Preparedness Programs (NHPP) developed the Healthcare Coalition Checklist for Pandemic Planning (HCCPP) with input from internal and external stakeholders. A Healthcare Coalition (HCC) is an organization of healthcare providers, private entities, and government agencies that work together to plan for and respond to disasters. To make the best use of available information and resources, HCCs should integrate their efforts with pandemic preparedness plans. The HCCPP assists HCCs in assessing, developing, and improving their preparedness and response plans for a pandemic event. The checklist follows the preparedness capabilities outlined in the *Healthcare Preparedness Capabilities: National Guidance for Healthcare System Preparedness*, which can be found on the Public Health Emergency website at http://www.phe.gov/Preparedness/planning/hpp/reports/Documents/capabilities.pdf.

Pandemic influenza presents a unique threat to all communities and affects schools, businesses, healthcare systems, and individuals in ways that are distinct from other emergency events. The HCCPP recommends actions to develop and/or improve coalition-based emergency response plans for pandemic influenza and encompasses all stages of a potential H1N1 ("swine flu") or other infectious disease outbreak. In conjunction with other tools, the HCCPP can help a HCC expand its pandemic influenza emergency response plan to include a diverse mix of partners including schools, businesses, community organizations, and government agencies.

HPP Capability 1: Healthcare System Preparedness

Healthcare system preparedness is the ability of a community's healthcare system to prepare, respond, and recover from incidents that have a public health and medical impact in the short and long term. The healthcare system role in community preparedness involves coordination with emergency management, public health, poison control centers, telephone advice/hotlines, mental/behavioral health providers, community and faith-based partners, pharmacies, and state, local, and territorial governments to provide and sustain a tiered, scalable, and flexible approach to attain needed disaster response and recovery capabilities while not jeopardizing services to individuals in the community, to provide timely monitoring and management of resources, to coordinate the allocation of emergency medical care resources and to provide timely and relevant information on the status of the incident and healthcare system to key stakeholders.

Healthcare system preparedness is achieved through a continuous cycle of planning, organizing and equipping, training, exercises, evaluations and corrective actions.

Recommended Actions:	In Place	In Progress	Undeveloped
1) Identify and document the purpose, roles, and responsibilities for HCC member agencies of			
the healthcare coalition in pandemic planning, ensuring a cross section of wide-ranging public			
and private stakeholders promoting community resiliency ^{1, 2, 3}			
2) Engage coalition partners in regularly scheduled meetings to assess pandemic planning efforts			
that prepare and prioritize assets and coordinate potential services of each member in a			
pandemic response ^{4, 5}			
3) Establish a timeframe to perform periodic assessments that will determine gaps (e.g. planning,			
staffing, training, equipping) in the healthcare coalition's ability to respond to a pandemic and			
identify resources that would mitigate identified gaps ^{6,7,8}			
4) Develop a coalition-wide training, exercise, and evaluation program which includes an annual			
schedule and provides opportunities for members to refine their knowledge and skills in personal			
protection, communication strategies, social distancing, allocation of scarce resources, Crisis			
Standards of Care, etc. to improve response capabilities in a pandemic scenario ^{8, 9, 10}			
5) Ensure that coalition member organizations account for at-risk individuals and those with			
special medical needs, such as children under 5 years, older adults, the homeless, the mentally			
impaired, or those with service animals and household pets who could become more vulnerable during a pandemic ^{1, 11, 12}			

HPP Capability 2: Healthcare System Recovery

Healthcare system recovery involves the collaboration with Emergency Management and other community partners, (e.g., public health, business, and education) to develop efficient processes and advocate for the rebuilding of public health, medical, and mental/behavioral health systems to at least a level of functioning comparable to pre-incident levels and improved levels where possible. The focus is an effective and efficient return to normalcy or a new standard of normalcy for the provision of healthcare delivery to the community.

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Recommended Actions:	In Place	In Progress	Undeveloped
1) Prepare for pandemic-specific recovery processes for each healthcare delivery system to			
address challenges such as staff absenteeism, resource shortages, and "a new normal" in patient			
care that may follow a prolonged pandemic response 13, 14			
2) Routinely collaborate with partner organizations to distinguish which functions and resources			
each organization may be able to provide each other during a pandemic (i.e. staffing, equipping,			
and training) ¹⁵			
3) Develop a Continuity of Operations Plan (COOP) that demonstrates how each organization will			
maintain essential functions during and after a prolonged pandemic (6-8 weeks) ^{16, 17}			

HPP Capability 3: Emergency Operations Coordination

Emergency operations coordination regarding healthcare is the ability for healthcare organizations to engage with incident management at the Emergency Operations Center or with on-scene incident management during an incident to coordinate information and resource allocation for affected healthcare organizations. This is done through multi-agency coordination representing healthcare organizations or by integrating this coordination into plans and protocols that guide incident management to make the appropriate decisions. Coordination ensures that the healthcare organizations, incident management, and the public have relevant and timely information about the status and needs of the healthcare delivery system in the community. This enables healthcare organizations to coordinate their response with that of the community response and according to the framework of the National Incident Management System (NIMS).

Recommended Actions:	In Place	In Progress	Undeveloped
1) Develop a written Pandemic Annex to the Emergency Operations Plan that outlines the			
healthcare coalition's multi-agency representation and coordination with emergency			
management during a pandemic at the local, state, interstate, and federal levels ^{1, 18}			
2) When necessary, activate coalition emergency response operations and query stakeholders on			
the following aspects of their healthcare delivery status: their ability to maintain essential			
services; their ability to assess triggers indicating the need for surge capacity (epidemiological			
surveillance data, etc.), and their need for additional resources (beds, staff, ventilator equipment,			
pharmaceuticals, and supplies) ^{18, 19}			
3) Use a real-time, integrated inventory management system to help coordinate coalition			
members and track available resources, particularly scarce resources (i.e., ventilators,			
Extracorporeal Membrane Oxygenation (ECMO) systems, bariatric equipment, neonatal isolettes,			
etc.) ^{2, 20}			
4) Identify triggers that demonstrate the transition from Response to Recovery (decreasing			
deaths, admissions to healthcare facilities, etc.), demobilize coalition agencies as the situation			
allows, and assist the return to a "normal state of operations" as defined by the coalition in a			
post-pandemic scenario ²¹			
5) Establish inter-operable communications or an alternate plan for coordinating communications			
with agencies outside of the coalition, including surrounding jurisdictions, state authorities, etc.			

HPP Capability 5: Fatality Management

Fatality management is the ability to coordinate with organizations (e.g., law enforcement, healthcare, emergency management, and medical examiner/coroner) to ensure the proper recovery, handling, identification, transportation, tracking, storage, and disposal of human remains and personal effects; certify cause of death; and facilitate access to mental/behavioral health services for family members, responders, and survivors of an incident. Coordination also includes the proper and culturally sensitive storage of human remains during periods of increased deaths at healthcare organizations during an incident.

Recommended Actions:	In Place	In Progress	Undeveloped
1) Develop a coalition-focused Fatality Management Planthat addresses the surge of human			
deaths that will increase the demand for storage capacity at alternative locations and the			
identification of human remains at the healthcare organization level 17,22			
2) Include a coalition-based family assistance plan to promote reunification of families with the			
remains of loved ones, taking into consideration mandated infection control and social distancing			
measures that may be in place ^{17, 22}			
3) Meet regularly with mental/behavioral health coalition members and other relevant parties			
(i.e. the American Red Cross, local health departments) to solicit support services for victims and			
caregivers who have or develop mental/behavioral afflictions (post-traumatic stress disorder			
(PTSD), grief, shock, depression, etc.) during and following a pandemic ^{17, 23}			

HPP Capability 6: Information Sharing

Information sharing is the ability to conduct multijurisdictional, multidisciplinary exchange of public health and medical related information and situational awareness between the healthcare system and local, State, Federal, tribal, and territorial levels of government and the private sector. This includes the sharing of healthcare information through routine coordination with the Joint Information System for dissemination to the local, State, and Federal levels of government and the community in preparation for and response to events or incidents of public health and medical significance.

Recommended Actions:	In Place	In Progress	Undeveloped
1) Establish a coalition-based protocol for providing situational awareness during a pandemic			
that includes essential elements of information (EEI) (i.e. patient tracking, bed tracking, available			
resources, syndromic surveillance, etc.) and provides consistent information to the incident common operating picture ^{24, 25, 26}			
2) Develop, refine, and sustain redundant, interoperable communication systems that connect all coalition members (including Emergency Medical Services (EMS) and 9-1-1) horizontally and			
vertically during all phases of a pandemic ²⁷			
3) Appoint a public information spokesperson who is credible and well-versed on the pandemic			
disease process to represent the coalition by providing honest, consistent, and factual			
communication to the public, media, health authorities, etc. 28, 29, 30, 31, 32			
4) Develop communication materials for healthcare organizations on how to request needed			
resources, such as Personal Protective Equipment (PPE) and/or Medical Countermeasures			
according to federal, state, and local Medical Countermeasure Distribution and Dispensing			
(MCMDD) plans			

HPP Capability 10: Medical Surge

The medical surge capability is the ability to provide adequate medical evaluation and care during incidents that exceed the limits of the normal medical infrastructure within the community. This encompasses the ability of healthcare organizations to survive an all-hazards incident, and maintain or rapidly recover operations that were compromised.

Recommended Actions:	In Place	In Progress	Undeveloped
1) Using available planning assumptions and tools for pandemic and in close coordination with			
local and state public health authorities, develop a Coalition Medical Surge Plan that defines a			
method to identify triggers (e.g. increased visits to hospitals and affiliated outpatient facilities			
and increased queries of triage hotlines such as Ask-A-Nurse or poison control centers) regarding			
respiratory illnesses leading to increased patient volume and requiring the need for expanded			
capacity. The plan should also include interventions the healthcare organization will use in			
response to maintain core services while accommodating surge operations 19, 33, 34, 35			
2) Develop Memoranda of Understanding (MOUs) and coordinate plans for integrated surge			
operations across the coalition to include pre-hospital (EMS), hospitals, nursing homes,			
community health care centers, home health and out-patient services by identifying 20%			
immediate bed availability (IBA) in order to mitigate and limit the need to surge beyond			
capacity ^{20, 36}			
3) Explore establishing plans for implementing telephonic methods of triaging callers by			
collaborating with healthcare coalition partners and potential new partners such as telephone			
advice/triage line systems, poison control centers, and information and referral hotlines ^{37, 38, 39}			
3) Develop a checklist of priority actions for medical surge (such as utilizing objective physiologic			
scores for triage (i.e. Sequential Organ Failure Assessment (SOFA) scores), cancelling elective			
procedures, discharging patients early, and changing EMS dispatch and transport criteria). This			
checklist will help healthcare organizations estimate surge capacity needs (i.e. beds, staff, and			
supplies/equipment) ^{40, 41}			
4) In cooperation with state and local governments and other relevant stakeholders (i.e. state			
Crisis Standards of Care committees), research, assess, develop, and exercise Crisis Standards of			
Care guidance that is ethically grounded, provides assurances for legal authority, and promotes			
coalition members' understanding, engagement, and willingness to provide support in a			
pandemic environment ^{4, 17, 42, 43}			
5) Create or refine an inventory of coalition resources available to support a large scale			
evacuation and/or shelter in place plan that may be implemented during a pandemic surge.			
Inventoried resources could include: transport types, bed types, identified alternate care sites,			
potential Federal Medical Station (FMS) locations, staff, equipment, etc.			

HPP Capability 10: Medical Surge (cont.)			
Recommended Actions:	In Place	In Progress	Undeveloped
6) Ensure coalition pandemic plans include compatible equipment and communications radio frequency plans for communicating common hospital diversion and bed capacity situational awareness with local, state, and regional EMS authorities ⁴⁴			
7) Coordinate efforts with state and local EMS governmental authorities to ensure the availability of emergency vehicles to transport patients to healthcare facilities and between healthcare facilities during a pandemic ⁴⁴			

HPP Capability 14: Responder Safety and Health

The responder safety and health capability describes the ability of healthcare organizations to protect the safety and health of healthcare workers from a variety of hazards during emergencies and disasters. This includes processes to equip, train, and provide other resources needed to ensure healthcare workers at the highest risk for adverse exposure, illness, and injury are adequately protected from all hazards during response and recovery operations.

Recommended Actions:	In Place	In Progress	Undeveloped
1) Develop a coalition-wide occupational health assessment tool that assesses the readiness			
status of current staff and their families in each member organization in terms of personal			
protective equipment (PPE) and pharmaceutical protection (fit-testing, mask types, vaccine and			
prophylaxis vs. non-pharmaceutical interventions) ^{43, 45, 46}			
2) Establish an education, training, and assistance program to ensure coalition organizations are			
prepared to respond in a pandemic by providing PPE training, fit-testing, vaccine prophylaxis, and			
other pertinent health services 18,47,48,49			
3) Recognizing that the supplies of respiratory protective devices held by hospitals at the start of			
an influenza pandemic are a key factor for healthcare workforce protection during a sustained			
pandemic response, coalition-partners should work to stock a supply of fit-tested respiratory			
protective devices for their workforce that could be used prior to distribution of federal stockpile resources ^{50,51,52}			
4) Ensure that MCMDD Plans developed by state/local governments include maintenance, multiple points of distribution, and dispensing protocols for all coalition response organizations ⁵³ , ⁵⁴			

HPP Capability 15: Volunteer Management

Volunteer management is the ability to coordinate the identification, recruitment, registration, credential verification, training, engagement, and retention of volunteers to support healthcare organizations with the medical preparedness and response to incidents and events.

Recommended Actions:	In Place	In Progress	Undeveloped
1) Collaborate with volunteer organizations to match their missions to the need for volunteers who could provide support in a pandemic scenario without impacting their core mission and services 48,55			·
2) Assess the requirements (type and quantity) of medical and non-medical volunteers needed during a pandemic and ensure liability protection for all who deploy ^{48,56}			
3) Develop a coalition-wide program and process for rapid credentialing, just-in-time training, assignment of volunteers, and procurement of needed equipment ⁴⁸			

References

¹ Gupta R. Enhancing community partnerships during a public health emergency: the school-located vaccination clinics model in Kanawha County, WV during the 2009 influenza A (H1N1) pandemic. W V Med J. 2011;107(6): 28-34.

² U. S. Department of Health and Human Services, *MSCC Handbook*. Washington, DC: U. S. Department of Health and Human Services; 2009:7-11.

³ Adini B, Goldberg A, et al. Relationship between equipment and infrastructure for pandemic influenza and performance in an avian flu drill. *Emerg Med J.* 2011;26(11): 786-90.

⁴ Duley M. The next pandemic: anticipating an overwhelmed healthcare system. *Yale J Biol Med*. 2005;78(5): 355–362.

⁵ Stoto MA. Regionalization in local public health systems: variation in rationale, implementation, and impact on public health preparedness. *Public Health Rep.* 2008;123(4): 441-9.

⁶ Mareiniss D, Hirshon T, et al. Disaster planning: potential effects of an influenza pandemic on community healthcare resources. *Am J Disaster Med*. 2009;4(3): 163-71.

⁷ Watkins RJ, Barnett DJ, et al. Corporate preparedness for pandemic influenza: a survey of pharmaceutical and biotechnology companies in Montgomery County, Maryland. *Biosecur Bioterror*. 2008;6(3): 219-26.

⁸ Bruria A, Goldberg A, Cohen R, Bar-Dayan Y. Impact of pandemic flu training on ability of medical personnel to recognize an index case of avian influenza. *European Journal of Public Health*. 2011;22(2):169-73. doi:10.1093/eurpub/ckr030.

⁹ Lyon W, Burkle F, et al. An influenza pandemic exercise in an urban setting, Part 1: hospital health systems lessons learned and implications for future planning. *Am J Disaster Med*. 2009;4(2):120-8.

¹⁰ Doxtator L, Gardner C, et al. Responding to a pandemic influenza: a local perspective. *Can J Public Health*. 2004;95(1): 27-31.

¹¹ Crouse Quinn S. Crisis and emergency risk communication in a pandemic: a model for building capacity and resilience of minority communities. *Health Promot Pract*. 2008;9(4 Suppl): 18S-25S.

¹² Peacock G, Moore C, et al. Children with special health care needs and preparedness: experiences from seasonal influenza and the 2009 H1N1 influenza pandemic. *Disaster Med Public Health Prep.* 2012;6(2) (2012): 91-93.

¹³ Centers for Disease Control and Prevention. *H1N1 Flu: Guidance for Businesses and Employers To Plan and Respond to the 2009 – 2010 Influenza Season.* Atlanta, GA: Centers for Disease Control and Prevention; 2009.

¹⁴ Nuño M, Reichert T, et al. Protecting residential care facilities from pandemic. *Proc Natl Acad Sci.* 2008;105(30): 10625–10630.

¹⁵ Centers for Disease Control and Prevention. *Abbreviated Pandemic Influenza Plan Template for Primary Care Provider Offices: Guidance from Stakeholders*. Atlanta, GA: Centers for Disease Control and Prevention; 2009 Aug.

¹⁶ Ten Eyck RP. Ability of regional hospitals to meet projected avian flu pandemic surge capacity requirements. *Prehosp Disaster Med.* 2008;23(2): 103-12.

¹⁷ LaDue L, Herrmann J. White paper: preparedness for catastrophic events. *Institute of Medicine of Medicine Forum on Medical and Public Health.* 2009 Jun 10-11.

¹⁸ Chamberlain AT, Seib K, et al. Perspectives of immunization program managers on 2009-10 H1N1 vaccination in the United States: a national survey. *Biosecur Bioterror*. 2012;10(1): 142-50.

¹⁹ World Health Organization. *WHO Hospital Preparedness Checklist for Pandemic Influenza: Focus on pandemic (H1N1).* Geneva, Switzerland: World Health Organization; 2009.

²⁰ Hodge JG, Anderson ED, et al. Facilitating hospital emergency preparedness: introduction of a model memorandum of understanding. *Disaster Med Public Health Prep.* 2011;5(1): 54-61.

²¹ Thompson DL. An integrated system for disaster preparedness and response. *J Bus Contin Emer Plan.* 2011; 5(2):118-27.

²² Johnson V. Mass fatality planning for pandemic influenza: a planning model from a seven-county region in Kentucky. *J Public Health Manag Pract.* 2009;15(2): 176-7.

²³ Everly GS, Barnett DJ, et al. The use of psychological first aid (PFA) training among nurses to enhance population resiliency. *Int J Emerg Ment Health*. 2010;12(1): 21-31.

²⁴ Sigmundsdottir G, Gudnason T, et al. Surveillance of influenza in Iceland during the 2009 pandemic. *Euro Surveill.* 2010;15(49):17-24.

²⁵ Zhang Y, May L, et al. Evaluating syndromic surveillance systems at institutions of higher education (IHEs): a retrospective analysis of the 2009 H1N1 influenza pandemic at two universities. *BMC Public Health*. 2011 Jul 26;11:591. doi: 10.1186/1471-2458-11-591.

²⁶ Griffin BA, Jain AK, Davies-Cole J, et al. Early detection of influenza outbreaks using the DC Department of Health's syndromic surveillance system. *BMC Public Health*. 2009 Dec 22;9:483. doi: 10.1186/1471-2458-9-483.

²⁷ Vaughan E, Tinker T. Effective health risk communication about pandemic influenza for vulnerable populations. *Am J Public Health*. 2009 Oct;99 Suppl 2:S324-32. doi: 10.2105/AJPH.2009.162537.

²⁸ Levin P, Gebbie E, et al. Can the health-care system meet the challenge of pandemic flu? Planning, ethical and workforce considerations. *Public Health Rep.* 2007;122(5): 573-8.

²⁹ Baum NM, Jacobson PD, et al. Listen to the people: public deliberation about social distancing measures in a pandemic. *Am J Bioeth.* 2009;9(11): 4-14.

³⁰ Aburto NJ, Pevzner E, et al. Knowledge and adoption of community mitigation efforts in Mexico during the 2009 H1N1 pandemic. *Am J Prev Med.* 2010;39(5): 395-402.

³¹ McCormick JB, Yan C, Ballou J, et al. Response to H1N1 in a U.S.-Mexico border community. *Biosecur Bioterror*. 2010 Sep;8(3):233-242.

³² Paton D, Parkes B, et al. Fighting the flu: developing sustained community resilience and preparedness. *Health Promot Pract.* 2008 Oct;9: 45S-53S, doi:10.1177/1524839908319088.

³³ Daugherty EL, Carlson AL, et al. Planning for the inevitable: preparing for epidemic and pandemic respiratory illness in the shadow of H1N1 influenza. *Clin Infect Dis.* 2010;50(8):1145-54.

³⁴ Felland LE, Katz A, et al. Developing health system surge capacity: community efforts in jeopardy. *Res Briefs*. 2008;(5):1-8.

³⁵ Blendon RJ, Koonin LM, Benson JM, et al. Public response to community mitigation measures for pandemic influenza. *Emerg Infect Dis.* 2008 May;14(5):778-786.

³⁶ Edwards TD, Young RA, Lowe AF. Caring for a surge of hurricane Katrina evacuees in primary care clinics. *Ann Fam Med.* 2007 Mar;5(2):170-174.

³⁷ Koonin LM, Hanfling D. Broadening access to medical care during a severe influenza pandemic: the CDC nurse triage line project. *Biosecur Bioterror*. 2013 Mar;11(1):75-80.

³⁸ Spaulding AB, Radi D, Macleod H, et. al. Design and implementation of a statewide influenza nurse triage line in response to pandemic H1N1 influenza. *Public Health Rep.* 2012;127(5):532-540.

³⁹ Bissell E, Fiorenzio C, Johnson A, et. al. Effectiveness of a 24/7 nurse advice line in reducing non-emergent visits to the emergency room in rural New Mexico. *Abstract presented at the Western Regional Meeting of the American Federation for Medical Research*. 2010 Jan 27-30.

⁴⁰ Sprung CL, Cohen R, et al. Chapter 1: Introduction. In: Recommendations and standard operating procedures for intensive care unit and hospital preparations for an influenza epidemic or mass disaster. *Intensive Care Med.* 2010 Apr;36 Suppl 1:S4-10.

⁴¹ Bielajs I, Burkle FM, et al. Development of prehospital, population-based triage-management protocols for pandemics. *Prehosp Disaster Med.* 2008;23(5): 420-30.

⁴² Levin E, Cadigan RO, et al. Altered standards of care during an influenza pandemic: identifying ethical, legal, and practical principles to guide decision making. *Disaster Med Public Health*. 2009 Dec;3 Suppl 2:S132-40. doi: 10.1097/DMP.0b013e3181ac3dd2.

⁴³ Joynt GM, Loo S, et al. Chapter 3: Coordination and collaboration with interface units. In: Recommendations and standard operating procedures for intensive care unit and hospital preparations for an influenza epidemic or mass disaster. *Intensive Care Med.* 2010 Apr;36 Suppl 1:S21-31. doi: 10.1007/s00134-010-1762-3.

⁴⁴ U.S. Department of Transportation. *EMS Pandemic Influenza Guidelines for Statewide Adoption*. Washington, DC: U.S. Department of Transportation; 2007.

⁴⁵ Barnett DJ, Levine R, et al. Gauging U.S. Emergency Medical Services workers' willingness to respond to pandemic influenza using a threat-and efficacy-based assessment framework. *PLoS ONE*. 2010;5(3): e9856. doi:10.1371/journal.pone.0009856.

⁴⁶ Maibach EW, Chadwick A, McBride D, et al. Climate change and local public health in the United States: preparedness, programs and perceptions of local public health department directors. *PLoS ONE*. 2008;3(7): e2838. doi:10.1371/journal.pone.0002838.

⁴⁷ Glaser MS, Chui S, et al. Predictors of acceptance of H1N1 influenza vaccination by FDNY firefighters and EMS workers. *Vaccine*. 2011;29(34): 5675-80.

⁴⁸ Barnitz L, and Berkwits M. The health care response to pandemic influenza. *Ann Intern Med.* 2006;145(2): 135-7.

⁴⁹ Savoia E, Biddinger PD, et al. Inter-agency communication and operations capabilities during a hospital functional exercise: reliability and validity of a measurement tool. *Prehosp Disaster Med.* 2010;25(1): 52-8.

⁵⁰ Rebmann T, Wilson R, LaPointe S, et al. Hospital infectious disease emergency preparedness: A 2007 survey of infection control professionals. *Am. J. Infect. Control*. 2009 Feb;37(1):1-8. doi: 10.1016/j.ajic.2008.02.007.

⁵¹ Hashikura M, Kizu J. Stockpile of personal protective equipment in hospital settings: Preparedness for influenza pandemics. *Am J Infect Control*. 2009 Nov;37(9):703-7. doi:10.1016/j.ajic.2009.05.002.

⁵² Garrett AL, Park YS, Redlener I. Mitigating Absenteeism in Hospital Workers During a Pandemic. *Disaster Med Public Health Prep.* 2009 Dec;3 Suppl 2:S141-7 doi: 10.1097/DMP.0b013e3181c12959.

⁵³ Seale H, Leask J, et al. Will they just pack up and leave? Attitudes and intended behavior of hospital health care workers during an influenza pandemic. *BMC Health Serv Res.* 2009;9: 30. doi: 10.1186/1472-6963-9-30.

⁵⁴ Radonovich LJ, Magalian PD, Hollingsworth MK, Baracco G. Stockpiling supplies for the next influenza pandemic. *Emerg Infect Dis.* 2009 Jun; 15(6): e1. doi: 10.3201/eid1506.081196.

⁵⁵ Barnett DJ, Balicer RD, et al. Assessment of local public health workers' willingness to respond to pandemic influenza through application of the extended parallel process model. *PLoS ONE* 2009;4(7): e6365. doi: 10.1371/journal.pone.0006365.

⁵⁶ Savoia E, Massin-Short S, et al. A toolkit to assess Medical Reserve Corps units' performance. *Disaster Med Public Health Prep*. 2010;4(3): 213-9.