



EXECUTIVE SUMMARY



Controlling an Influenza Epidemic Before or Without Vaccine: Military Lessons from nH1N1

Pandemic Influenza Workshop, Phoenix AZ, 9 August 2010

In 2009, the world responded to its first influenza pandemic since 1968. The novel influenza A (H1N1) virus (hereafter referred to as nH1N1) was first detected in April 2009 in California and then in Texas. On 11 June 2009 the World Health Organization (WHO) declared a nH1N1 pandemic and 16 months later, on 10 August 2010, WHO declared its end. The 2009 nH1N1 virus affected at least 209 countries in all Combatant Command Areas of Responsibility, including all U.S. states and territories. While effective vaccine is the cornerstone of influenza prevention and control, vaccine against nH1N1 was not available until six months into the pandemic.

Given that it can take several months to develop an effective vaccine, the Armed Forces Health Surveillance Center (AFHSC) and the Center for Disaster and Humanitarian Assistance Medicine sponsored a one-day workshop focused on the use of non-pharmacologic interventions (NPIs) as well as targeted antiviral prophylaxis to mitigate an influenza pandemic. The Workshop, "Controlling an Influenza Epidemic Before or Without Vaccine: Military Lessons from nH1N1," was held on 9 August 2010 in Phoenix, Arizona in conjunction with the U.S. Army's Force Health Protection Conference. The Workshop objectives included: (1) examine use of NPIs among different Department of Defense (DoD) populations, (2) identify NPIs and antiviral prophylaxis strategies with demonstrated effectiveness, and (3) discuss how strategies may change with different influenza virus characteristics.

Approximately 130 participants from more than 70 DoD organizations attended the Workshop. The majority of attendees were affiliated with the uniformed services, i.e., Army (54%), Navy (24%), Air Force (17%), Coast Guard (2%), and Public Health Service (1%). Half of the participants consisted of Public Health Emergency Officers

(PHEOs) or Assistant PHEOs and 63% were physicians.

The Workshop presentations were organized by the population and setting in which nH1N1 outbreaks occurred: dynamic populations (e.g., recruit training camps), static populations (e.g., military treatment facilities), pre-deployment and deployment environments, and shipboard and other close quarter environments. For example, Workshop participants learned about an outbreak of nH1N1 at the U.S. Air Force Academy (USAFA) in June 2009 representing one of the largest recognized H1N1 clusters at a U.S. college to date. The rapid peak of the outbreak and subsequent decline suggest the effectiveness of control measures enacted immediately upon outbreak recognition. The combination of aggressive isolation of ill cadet trainees, intense and early public health education campaign, and prompt implementation of healthcare infection control practices limited the duration and scope of the nH1N1 infection at the USAFA. Other case studies presented at the Workshop included nH1N1 outbreaks and mitigation strategies at Fort Leonard Wood, Naval Recruit Training Command Great Lakes, Fort Lewis, Fort Bliss, Kuwait, and on shipboard environments such as the USS Dubuque, USS Boxer, and a Peruvian navy ship. These descriptive case studies were followed by presentations regarding DoD Health Affairs policy and service-specific guidance on use of NPIs. The Workshop ended with a panel discussion that provided an open forum for dialogue as well as for questions and answers.

The feedback evaluations by participants were very positive and included several helpful comments of potential value in planning future, similar workshops.

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