# The United States Department of Defense and the International Health Regulations (2005): perceptions, pitfalls and progress towards implementation

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## Background

The Department of Defense of the United States of America (USA) has been conducting respiratory disease surveillance among United States military personnel around the world since the mid-1970s.[1] The Department's Global Emerging Infections System began in 1997[2] and currently includes nearly 500 sites with partners in 75 countries. The primary focus of the network is the early detection and rapid response to emerging or newly identified viruses of public health concern.[3] The World Health Organization's (WHO's) International Health Regulations (IHR) (2005) form the central guiding framework for both reporting of public health threats and potential public health emergencies of international concern.

In recent years, the Department of Defense network has established disease surveillance in collaboration with host countries and has built a core capacity within each host country for sustained monitoring of respiratory disease activity within their borders. This network has demonstrated the ability to identify and respond quickly to public health emergencies of international concern, as illustrated in the influenza pandemic of 2009–10, and has also provided multiple viral-strain contributions to influenza vaccines over the past decade.[3]

## H1N1 pandemic response

In early April of 2009, two Department of Defense laboratories (the Naval Health Research Center in San Diego, California, and the Unites States Air Force School of Aerospace Medicine in San Antonio, Texas) in collaboration with the United States Centers for Disease Control, became the first public health institutions to identify the 2009 novel A/H1N1 influenza pandemic.[4] Between 15 April 2009 and 30 August 2009 (the first wave of the WHO-declared pandemic), the Department of Defense global network of influenza surveillance sites supported 14 host country partners in confirming their first cases of novel influenza A/H1N1. The Department of Defense also identified more than 1000 cases among military personnel or their family members located in 13 countries. Shortly after the onset of the pandemic, the Armed Forces Health Surveillance Center began coordinating public health centres and laboratories of the United States' Navy, Army and Air Force to aggressively respond to this new threat among beneficiaries and active duty service members worldwide.

An initial area of concern quickly became identifying the responsible party and appropriate mechanism for reporting laboratory-confirmed cases of novel influenza A/H1N1 among United States military personnel stationed in foreign countries in compliance with the IHR. Interactions between medical units of the United States military and the corresponding host countries' Ministries of Health varied widely based on established formal and informal arrangements, the nature of current missions and the host country's requirements for reporting routine medical events during outbreaks of disease and other public health emergencies. Where a collaborative relationship was established with host country counterparts, reporting of pandemic influenza A/H1N1 cases to the host country Ministry of Health was rather seamless. In cases where a relationship did not exist, and for all individuals overseas who were diagnosed through Department of Defense reference laboratories, cases were reported through the different Department of Defense service public health hubs to the Armed Forces Health Surveillance Center. Detailed case lists were then compiled and submitted to the United States Department of Health and Human Services, the designated national focal point for IHR reporting. Reports were then sent by this Department through the WHO regional offices and to the national focal points in the corresponding host country per Articles 6 and 9 of the IHR. In either circumstance, lines of meaningful bilateral communication and coordination were tested and further strengthened.

## IHR issues

Two significant issues related to the IHR became rapidly apparent during the 2009 H1N1 pandemic. First, Article 9 notes that "States Parties shall, as far as practicable, inform WHO within 24 hours of receipt of evidence a public health risk identified outside their territory that may cause international disease spread as manifested by exported or imported: human cases; vectors carrying infection or contamination; or goods that are contaminated." With the constant movement of troops, the possibility of importing and exporting known cases (as defined in Article 9) of novel pandemic influenza A/H1N1 became very real. This was reminiscent of 1918–19 during which global transit of military forces almost certainly enhanced the spread of the incorrectly named Spanish influenza.[5] Thus, the Department of Defense pursued the primary objective of minimizing the spread of disease for the host countries in question and complying with the IHR reporting mandates as defined in Articles 9 and 10 (along with Articles 25 and 28 related to air transit and ports of entry) in close

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coordination with other United States government agencies, WHO regional offices and IHR national focal points. Early in the pandemic, United States government agency leaders agreed to defer to host countries to officially report to WHO the first cases among United States military personnel within their territories. If, for whatever reason the host country did not report a case, the United States government would be obligated to report under Article 9. To ensure this was possible, the Armed Forces Health Surveillance Center tracked and monitored cases among United States service members throughout the first wave of the pandemic and this information was made available through official channels via the IHR national focal points.

The second issue was a reservation statement that the United States submitted as part of its acceptance of the IHR that is found in Appendix 2: Reservations and other State Party communications in connection with International Health Regulations (2005). This understanding, related to the reporting of public health risks in other countries, stated that "any notification that would undermine the ability of the US Armed Forces to operate effectively in pursuit of US national security interest would not be considered practical for purposes of reporting under Article 9". Some in the international community have criticized this understanding as a potential loophole that might allow noncompliance with reporting requirements. It is important to note that every effort was made to report all known, documented cases of novel influenza A/H1N1 detected among United States military personnel outside continental USA and this reservation statement was not used by the USA during the 2009 pandemic. The Department of Defense took very deliberate steps to ensure all laboratory-confirmed cases among its military personnel were actively tracked and reported to appropriate stakeholders at all levels within the United States government, the host government and to WHO. An important lesson learnt was that, if these channels of communication had been better established, there would have been more rapid dissemination of the public health information that was vital to stakeholders at all levels for better situational awareness and, more importantly, better disease-control coordination.

The role of security and peacekeeping forces in areas of conflict, humanitarian crises or complex emergencies in the global transmission of influenza was underappreciated given their high mobility and interaction with civilian counterparts in multiple settings.[6] In the wake of the 2009 pandemic, the Department of Defense has developed a policy that mandates its military units overseas to engage proactively with their host country's public health counterparts, in coordination with the respective United States embassy, so that future events will allow for more seamless coordination through strong relationships already established at the local level.

## Conclusion

The lessons learnt with respect to IHR reporting requirements and communication will almost certainly apply to other countries and their citizens abroad, and make this an imperative topic to discuss in an open forum when decisions are made to update the IHR. There are numerous official personnel from many countries on foreign soil – military service members, diplomatic corps and United Nations peacekeeping forces – and they have similar disease reporting issues. What is the correct process for disease reporting for such populations? New policies that represent multiple sectors at all levels are needed before the onset of the next, potentially more severe, pandemic. Building capacity and strong relationships at the local level will help the international community successfully implement the IHR (2005) by the 2012 target date. ■

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