

Nominated For Gregg Group Award for Teamwork

NOMINATION FOR
XXXX, RN, FNP, PhD

XXXX, RN, MSN, MPH

XXXX, RN, MSN, MPH

XXXX, DVM, MPH (USAF)

Nominator's Name:
XXXX, MD, MPH

ACCOMPLISHMENT:

In recognition of XXXX, XXXX, XXXX, and XXXX for their exemplary leadership of an influenza investigation aboard a US Navy amphibious assault vessel. The team's ability to effectively collaborate with US Navy and US Marine Corps personnel led to the efficient and timely collection of information related to the transmission of pandemic influenza A (H1N1). Extensive planning, negotiating, and collaboration led to targets being reached for data collection of transmission characteristics by interview of 610 Sailors and Marines, 520 serum samples, and 588 medical record abstractions. Initial data were reported at the 20XX annual Epidemic Intelligence Service conference in Atlanta, Georgia, providing a timely review of the outbreak and its characteristics and sharing preliminary findings with the public health community. Recommendations from the investigation included: consider screening measures prior to embarkation, strengthen mechanisms for report or self-report of illness, and review options for surveillance of close contacts. Advanced data analyses and manuscript development are ongoing, and extend the preliminary findings on transmission patterns in congregate settings. The time period covered for this nomination include the investigation from September to October 20XX, and the collation, analysis, and dissemination of the findings from October 20XX to January 20XX. XXXX, XXXX, and XXXX have active RN licenses and are in good standing. XXXX is a veterinary officer in the USAF. The team members were Epidemic Intelligence Service officers during the investigation, and assigned to the Centers for Disease Control and Prevention (CDC).

BACKGROUND:

In June 20XX, a San Diego, California-based US Navy amphibious assault vessel with a population of 2300 Sailors and Marines, set sail for a brief exercise in California waters. As outbreaks of pandemic H1N1 influenza were occurring throughout the US during this time, US Navy medical personnel sampled febrile personnel and tested them for H1N1 influenza. During the first days of July, while the vessel was at sea, Sailors and Marines began to report to the medical department with symptoms of fever, cough, and body ache. On 3 July, respiratory swab and serum specimens from nine patients onboard the vessel were sent by helicopter for H1N1 testing. On 4 July, the chief medical officer was notified of the first confirmed H1N1 influenza case. Patients onboard were treated with oseltamivir (anti-viral medication) if presenting within 48 hours of symptom onset and isolated. The vessel returned to port in mid-July, had a week layover, and then continued with a second exercise until 3 August. Additional H1N1 cases occurred during the second exercise. Between 29 June and 30 July 20XX, a total of 161 Sailors and Marines were sampled for H1N1 with 136 confirmed cases. The vessel was in port during the month of August 20XX, prior to departing for a 9 month deployment.

In August 20XX, the CDC Quarantine Station in San Diego, California, was invited by the Naval Environmental and Preventive Medicine Unit 5, the Naval Health Research Center, and US Navy 3rd Fleet Command to conduct an epidemiologic investigation and serosurvey of the H1N1 influenza virus outbreak aboard the vessel.

Since Navy and Marine personnel were dispersed between sailings in August, three US Public Health Services nurses, XXXX, XXXX, and XXXX, and XXXX, were invited to sail with the ship for several weeks, beginning in September, to conduct a formal retrospective outbreak investigation while underway. The officers were chosen based on their ability to function in multiple roles, as epidemiologists and clinicians. XXXX and XXXX served as team leads, where they coordinated team activities, served as service and agency liaisons, and performed data collection and analyses. XXXX and XXXX performed data collection, medical record abstractions, and assisted in data organization. The goals of the investigation were to 1) describe characteristics of influenza-like illness and pandemic H1N1 disease among crew members; 2) quantify the attack rate of symptomatic and asymptomatic crew during the outbreak; 3) investigate transmission patterns and risk factors for transmission; and 4) assess impact of illness on ship operations and mission, including impact on the medical ward and lost work time.

INTERVENTION:

The team exceeded expectations in conducting their investigation, and their actions were a positive reflection of the dedication and commitment to public health ascribed by the USPHS. Activities by the team included:

- Led extensive cross-service and agency collaboration to establish data and specimen protocols and laboratory processing.
- Led the development of data collection tools, including primary measures of transmission characteristics, a medical abstraction tool, and a specimen collection tool.
- Recruited and collected data on transmission characteristics on 610 Sailors and Marines, 520 serum specimens, and 588 medical record abstractions, meeting data collection targets.
- Led several teams of Marine Corps medics with serum collection.
- CDC led training and coordination for analysis of serum specimens by the Naval Health Research Center to 1) identify subclinical infections, 2) reduce the likelihood of case misclassification, 3) interpret the antibody titer level results, and 4) compare acute antibody titers to convalescent titers for positive cases.
- Led development of data analysis programming and synopsis of results.
- Presented results at the annual Epidemic Intelligence Service and Council for State and Territorial Epidemiologists conferences in 20XX.
- Finalizing a manuscript for submission to a peer-reviewed journal for dissemination.

IMPACT:

The H1N1 investigation provided community, clinical, and serologic data to support the identification of transmission patterns of a novel influenza virus aboard a US Navy vessel, and strengthened the collaborative relationship between uniformed services responding to outbreak investigations. The impact of this investigation can be seen through:

- The data collected constituted nearly 25% of the vessel's population. Of selected individuals, 87% agreed to participate, indicating a high degree of collaboration and support, and reinforcing the reliability of the data being a representative sample to generalize findings to similar populations.

- The data include a large amount of self-reported transmission characteristics, medical record data, and serologic data, presenting the opportunity to conduct high-level analyses on transmission patterns, asymptomatic cases, and co-morbid complications.
- The findings were compared to other vessel outbreaks involving H1N1 and similar viruses, and contribute to the generalized knowledge of H1N1 response, recommendations, and planning.
- The partnership with the Naval Health Research Center led to specialized training on serum analysis, conducted by CDC, and allows for the Naval Health Research Center to conduct additional serologic analysis in accordance with CDC standards.
- The collaboration led to the heightened visibility of the USPHS Commissioned Corps, as the officers sailed with the vessel and continue to collaborate with enlisted personnel and officers from the US Navy and Marine Corps.