



Immunization Knowledge, Attitudes, and Beliefs Among US Military Healthcare Professionals: Surveys of Navy Corpsmen Across Two Generations



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Background

- The US military provides many immunizations to its adult members to protect them from infectious disease threats, including adenovirus, anthrax, diphtheria, Hepatitis A, Hepatitis B, influenza, Japanese encephalitis, measles, meningococcal disease, mumps, pertussis, pneumococcal disease, polio, rabies, rubella, smallpox, tetanus, typhoid, varicella, and Yellow Fever.
- Ancillary healthcare staff members, including Navy hospital corpsmen, are the frontline for immunization delivery.
- Concerns have been raised about some military immunization practices, especially with the added complexity of bio-defense vaccines targeting anthrax and smallpox.
- Evaluation of the potentially evolving immunization knowledge, attitudes, and beliefs among military immunization professionals may be important to understand the effectiveness of military education and support programs.

Methods

- A survey on immunization knowledge, attitudes, and beliefs was designed and distributed to US Navy corpsmen in mid-level military careers 2000.
- The survey was redesigned for distribution to a new group of comparable-level Navy corpsmen in 2012.



Hospital Corpsmen aboard aircraft carrier USS George Washington (CVN 71) administer influenza vaccine. Photo by MCS2 William Petreman, Sep 2011

Results

- 115 Navy corpsmen provided information on the 2000-era survey.
- 80% were male; mean age 28 years at the time of response.
- 6% had formal education past high school.
- Basic immunization knowledge was strong, based on questions about influenza, hepatitis, and tetanus vaccines, although 43% of respondents in the 2000-era did not identify anthrax vaccine as FDA-licensed.
- More than half of respondents reported personally experiencing an adverse reaction to a vaccine; 6% sought care for adverse reactions.

Results (continued)

- All respondents agreed that vaccines are important for disease prevention and 70% agreed that vaccines are generally safe.
- No respondents agreed with a statement that vaccines are only important for children; 5% agreed that the military requires unnecessary vaccines.

Percentage of Navy corpsmen from 2000-era survey who agreed with these military-specific belief statements.



- More than 96% recognized their fellow corpsmen as sources of information on immunizations, and nearly 80% felt personally comfortable in their ability to provide such information to others.
- Results of the 2012-era survey will be compared to the 2000-era, when available.

Conclusions

- The US military relies heavily on ancillary healthcare staff to administer vaccines to adult members and provide information on immunizations.
- This 2000-era survey of Navy corpsmen demonstrated strong vaccine knowledge, with suggested gaps related to the then-newer anthrax vaccine. Questions on attitudes and beliefs identified areas of potential discomfort, while recognizing the importance of corpsmen on the front-line of immunization delivery.
- Comparison to 2012-era surveys may reveal generational differences and the effectiveness of the US military in educating and supporting these critically important immunization professionals.