

Public Health Subcommittee

Measles, Mumps, and Rubella (MMR)
Booster Immunization Practices

February 10, 2020

Overview



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- Summary of Subcommittee Activities to Date
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Membership



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Tasking

On November 7, 2019, the Assistant Secretary of Defense for Health Affairs directed the Defense Health Board ("the Board") to provide recommendations to the Department of Defense (DoD) on the optimal way to minimize the risk of mumps in our armed forces and maintain medical readiness.



Tasking (2/4)

- In 2010, the Board reviewed this topic for the Navy and did not recommend a universal third MMR immunization strategy:
 - Current practices should be continued.
 - Selective immunization for those with:
 - < 2 documented MMR vaccines, or
 - Low titers of measles or rubella neutralizing antibodies
 - Consider universal MMR vaccination if the risk of mumps outbreaks increase.



DEFENSE HEALTH BOARD FIVE SKYLINE PLACE, SUITE 810 5111 LEESBURG PIKE FALLS CHURCH, VA 22041-3206

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MEMORANDUM FOR: GEORGE PEACH TAYLOR, JR., M.D., DEPUTY ASSISTANT SECRETARY OF DEFENSE (FORCE HEALTH PROTECTION AND READINESS), PERFORMING THE DUTIES OF THE ASSISTANT SECRETARY OF DEFENSE FOR HEALTH AFFAIRS

SUBJECT: Recommendations Pertaining to the Inclusion of the Measles, Mumps, and Rubella Vaccine within the Navy Accessions Screening and Immunization Program 2010-04

INTRODUCTION

- In a memorandum dated June 9, 2010, the Acting Chief of the Bureau of Medicine and Surgery, Department of the Navy, requested that the Defense Health Board (DHB) review the scientific evidence concerning the effectiveness of the Measles, Mumps, and Rubella (MMR) vaccine in preventing mumps disease.
 - In light of recent mumps outbreaks in the United States, the Board was requested to advise Navy Medicine if they should mandate MMR vaccination in recruit training centers or continue the current protocol under the Accessions Screening and Immunization Program (ASIP).
 - b. At present, recruits are screened for immunity to MMR, and only those indirectly demonstrating a lack of immunity to mumps are vaccinated. Mandatory MMR vaccination would be reinstituted if an outbreak were to occur.
- The Board accepted the request to examine the Navy ASIP regarding mumps on June 9, 2010.
- 3. The Navy proposed three potential courses of action for the Board's consideration;
 - a. Continue the current ASIP and monitor mumps case incidence within the Services and broader community. Reinstitute mandatory MMR vaccinations for all recruits if mumps outbreaks occur at recruit training sites or if the number of cases increases.
 - b. Continue the current ASIP with no monitoring of mumps case incidence and assume the current MMR recruit immunization rate of 10 to 15 percent is sufficient to prevent mumps outbreaks and increased case incidence.
- Exclude MMR vaccine from the ASIP and resume mandatory universal MMR vaccination upon accession.
- The DHB Infectious Disease Control Subcommittee was assigned to address this question.
 The Subcommittee met on June 9, 2010 and July 14, 2010. Among the issues examined



Tasking (3/4)

• In 2019, there were at least 2 major incidences of mumps across the Services:



USS Fort McHenry

- 28 cases of illness out of 703 crew members
- Quarantined at sea for about 4 months



173rd Airborne Division of the Army

- 10 cases of illness, 1 confirmed case of mumps
- Ring vaccination of about 200 Soldiers



Tasking (4/4)

- Determine if universal administration of MMR vaccine at accessions and a booster vaccine for current service members is warranted based on recent events. Specifically:
 - Review scientific literature and epidemiologic trends to quantify current and future risk to medical readiness from mumps outbreaks
 - Determine if current immunization policy is sufficient to mitigate potential risk and, if not, recommend best practices to mitigate that risk.
 - Provide any additional recommendations to inform policy, such as impact to budgetary and logistical requirements



Summary of Activities to Date

• A "kick off" preparatory meeting with the Public Health Subcommittee is scheduled for February 25-26, 2020

 DHB staff have conducted 5 informational teleconferences with subject matter experts, epidemiologists, preventive medicine/public health responders, and policy makers on the MMR vaccine



Areas of Interest

Topic	Discussion Points
Science of mumps vaccine	 Waning immunity Challenges of serological testing
Epidemiological burden of mumps	 U.S. and global surveillance Surveillance within the Military
Current recommendations	 Current recommendations from the Centers for Disease Control and Prevention
DHA Immunization Policies	 Current DHA policies and practice Challenges of immunization practice



Way Ahead

 Report expected to be briefed and deliberated at the next Board meeting in May 2020



Questions?