



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON DC

30 Nov 16

MEMORANDUM FOR ALMAJCOM/SG
ALMTF/CC

FROM: HQ USAF/SG/3/5
7700 Arlington Blvd
Falls Church, VA 22042-5158

SUBJECT: Air Force Mumps Vaccination Guidance

The attached guidance provides clarification to Air Force Instruction 48-110_IP, "Immunizations and Chemoprophylaxis for the Prevention of Infectious Diseases", 7 Oct 2013 with regards to mumps vaccination only. Beginning 1 Jan 2017, individuals deploying or undergoing permanent change of station (PCS) to OCONUS locations other than Alaska and Hawaii must demonstrate acceptable presumptive evidence of immunity. Similar proof also will be required for health care personnel. New accessions to the Air Force already are screened for individual mumps immunity so this guidance will not change their procedures. All of these changes are consistent with current recommendations of the Advisory Committee on Immunization Practices (ACIP).

TRICARE beneficiaries and family members who are undergoing a PCS to OCONUS locations other than Alaska or Hawaii are encouraged to review their mumps vaccination status.

The AF/SG point of contact is Lt Col Ruth Brenner, (703) 681-6030, DSN 761 or via email ruth.brenner.mil@mail.mil.

A handwritten signature in black ink, appearing to read "Roosevelt Allen, Jr.", written in a cursive style.

ROOSEVELT ALLEN, JR.
Major General, USAF, DC
Director, Medical Operations & Research
Office of the Surgeon General

Attachment:
Clarification of Air Force Mumps Vaccine Guidance

Clarification of Air Force Mumps Vaccine Guidance

Key Points:

- This document provides clarification of Air Force Instruction 48-110_IP, “Immunizations and Chemoprophylaxis for the Prevention of Infectious Diseases”, 7 Oct 2013 with regards to mumps vaccination only.
- Air Force mumps vaccination policy is in accordance with the Advisory Committee on Immunization Practices (ACIP) recommendations will not differ.
- Airmen deploying or undergoing Permanent Change of Station OCONUS (to locations other than Alaska and Hawaii) will require an update in Aeromedical Services Information Management System (ASIMS) and subsequent verification of mumps immunity.
- Airmen already located OCONUS will not be affected.
- Health Care Workers/MEHP will undergo the same update as OCONUS travelers.
- New accession sites may already be following current ACIP recommendations.
- Implementation will begin 1 Jan 2017.

Table: Comparison of Current Air Force Mumps Immunity Practice and New Acceptable Presumptive Evidence of Mumps Immunity Requirements

Group	Current Practice	New Requirement
PCS/Deploying OCONUS Health Care Personnel/MEHP	One of the following: - Presumed mumps immunity based on positive measles and rubella titer, or - Documented administration of 2 doses of live mumps virus-containing vaccine, or - Laboratory confirmation of disease, or - Born before 1957	One of the following: - Laboratory evidence of immunity (mumps IgG in serum, equivocal results will be considered negative), or - Documented administration of 2 doses of live mumps virus-containing vaccine, or - Laboratory confirmation of disease, or - Born before 1957
CONUS	One of the following: - Presumed mumps immunity based on positive measles and rubella titer, or - Documented administration of 2 doses of live mumps virus-containing vaccine, or - Laboratory confirmation of disease, or - Born before 1957	No change
New Accessions	One of the following: - Laboratory evidence of immunity (mumps IgG in serum, equivocal results will be considered negative), or - Documented administration of 2 doses of live mumps virus-containing vaccine, or - Laboratory confirmation of disease, or - Born before 1957	No change
Non-Airmen beneficiaries	- Offer MMR according to ACIP guidelines	- No change

1. Individuals currently CONUS/OCONUS but with orders to deploy/PCS OCONUS (to locations other than Alaska and Hawaii)

ASIMS immunization groups will be updated to comply with this requirement. When individuals report to the Immunization Clinic or Public Health office at the losing base (regardless of location) for clearance prior to PCS or deployment, personnel will ensure that individual is assigned to the appropriate immunization group in ASIMS to identify the “Mumps2Req” requirement. Once assigned to the appropriate immunization group, the Airman will appear as due on the IMR lists, and will be identified in ASIMS and require one of the following:

- Laboratory evidence of immunity (mumps IgG in serum, equivocal results will be considered negative), or
- Documented administration of 2 doses of live mumps virus-containing vaccine, or
- Laboratory confirmation of disease, or
- Born before 1957

If any of these criteria are met, the Airman is considered immune to mumps and will not require vaccination.

If none of these criteria are met, the Airman will be flagged in ASIMS, and should undergo testing for mumps antibody. Positive titers for each IgG component (measles, mumps and rubella) will be documented individually in ASIMS.

NOTE: Airmen who do not meet any of the four criteria listed above should be tested for mumps antibody first, rather than moving straight to MMR vaccination. A “test first” policy is more cost-effective, given mumps seroprevalence, cost of MMR vaccine, and cost of antibody testing. In the case of short-notice deployment, if the mumps titer cannot be drawn with result returned prior to deployment, it is acceptable to offer vaccination without evidence of negative mumps titer. Every effort should be made to complete the update before departing home station.

If the mumps antibody is negative, the Airman requires two doses of MMR (or MMRV) vaccine, separated by at least 28 days.

In a situation where mumps IgG in serum is negative, but one previous dose of MMR vaccine has been documented, only one additional dose will be administered (separated by at least 28 days from the first dose).

If mission requirements preclude receipt of a second dose of MMR (or MMRV) vaccine, ASIMS will continue to show the Airman as due/overdue for the second vaccine until the “Mumps2Req” requirement is removed upon return to CONUS.

NOTE: A combined MMR titer positive in ASIMS is not considered laboratory evidence of immunity for this group because previous documentation allowed MMR positive despite not having individual titers performed. An individual who had positive titers to measles and rubella was presumed positive to mumps and documented as MMR positive. If the individual is documented in ASIMS to have a combined MMR positive titer but no confirmation of an individual mumps positive titer in either ASIMS or the medical record is present, then a serum IgG titer for mumps should be drawn.

2. Individuals currently CONUS/OCONUS and not scheduled for deployment/PCS OCONUS

Individuals who do not have laboratory evidence of immunity (mumps IgG in serum) or documented administration of two doses of live mumps virus-containing vaccine will NOT be flagged in ASIMS. Individuals already CONUS/OCONUS will retain their current status in ASIMS. If the individual is not “red” or “yellow” in ASIMS for MMR, no action is necessary.

3. New accessions (NOTE: the process outlined below has been in place since Jun 2013)

New accessions processed through Basic Military Training (BMT), United States Air Force Academy (USAFA), Officer Training School (OTS) (Total Force Indoctrination Training/Total Force Officer Training/Commissioned Officer Training) will require one of the following in accordance with local procedures:

- Laboratory evidence of immunity (mumps IgG in serum, equivocal results will be considered negative), or
- Documented administration of 2 doses of live mumps virus-containing vaccine, or
- Laboratory confirmation of disease, or
- Born before 1957

If any of these criteria are met, the member is considered immune to mumps and will be exempt from vaccination in ASIMS.

If none of these criteria are met, the member will be flagged in ASIMS as requiring two doses of MMR (or MMRV) vaccine, separated by at least 28 days.

In a situation where mumps IgG in serum is negative, but one previous dose of MMR vaccine has been documented, only one additional dose will be administered (separated by at least 28 days from the first dose).

Positive titers for IgG component (measles, mumps and rubella) will be reported individually in ASIMS. The option in ASIMS to select a combined “MMR titer” will no longer be available; however, those who already have the combined titer documented do not need to have this removed.

It is possible for a new accession, who is also a former dependent to have two documented doses of MMR vaccine and still follow the process of mumps titer collection upon accession.

Airmen accessing through Reserve Officer Training Course (ROTC) will have their immunization status reviewed upon arrival at their first duty station.

4. Health Care Personnel (HCP)/Medical Employee Health Personnel (MEHP)

Upon implementation of this policy, ASIMS will require all health care personnel to have the same documentation of mumps status as International Travelers (group 1 above). HCP will become “yellow” in ASIMS until 1 Jun 2017 to allow for updated immunizations, and will be “red” thereafter, until the requirement is fulfilled. Contractors will fulfill the requirement based on their status as MEHP.

5. Non-Airmen Beneficiaries

All beneficiaries born after 1956 should be offered MMR according ACIP guidelines (<http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/mmr.html>).

Appendix

Background:

In HQ USAF/SGO Memo, “Vaccine Policy and Guidance for Adults and Accessions”, 7 Jun 2006, Airmen who have positive antibodies for either measles or rubella, OR who have proof of vaccination to measles or rubella, are not required to be vaccinated or serologically tested for mumps. In Air Force Instruction 48-110_IP, “Immunizations and Chemoprophylaxis for the Prevention of Infectious Diseases”, 7 Oct 2013, personnel born after 1957 must have received two lifetime doses of the measles-mumps-rubella (MMR) vaccine OR have positive serologic results. What constitutes “positive serologic results” was left undefined, however, previous Air Force policy was to not record individual mumps serology in ASIMS (Aeromedical Services Information Management System). Airmen with positive antibodies against measles and rubella were *presumed* to be immune against mumps.

AFI 48-110_IP, 4.9, states:

Measles, mumps, and rubella (MMR)

a. Military indication. To prevent MMR, primarily by boosting immunity acquired from childhood immunization. These three acute viral infections are spread by the respiratory route or person-to-person contact. In military trainee populations, each can cause disease outbreaks. Rubella usually causes a mild infection, but infection during the first trimester of pregnancy puts the fetus at high risk of congenital rubella syndrome and birth defects. Young adults may experience more severe complications from mumps infection. All three diseases occur worldwide, primarily among children.

b. Basic trainees and other accessions. Unless seroimmune to both measles and rubella, administer MMR vaccine to susceptible basic trainees and accessions within the first 2 weeks of training.

c. Military and civilian personnel. Presume immunity through infection for persons born in 1957 or earlier. Ensure personnel born after 1957 have received two lifetime doses of MMR vaccine or have positive serologic test results. Immunity against mumps is not necessary as a military requirement, but may be appropriate in exceptional clinical circumstances such as outbreaks.

d. Occupational risk. Ensure health care workers have received two documented doses of MMR vaccine or have positive serologic test results.

Recent high-profile domestic mumps outbreaks involving college students, religious communities, and professional athletes, and ongoing mumps outbreaks overseas, however, have reinforced the need for Airmen to have immunity against mumps to protect health and ensure military readiness. CDC’s (Centers for Disease Control and Prevention) current guidance on acceptable presumptive evidence of immunity to mumps for international travelers (which approximates expeditionary Airmen involved with a permanent change of station (PCS) or deployment to an overseas location) includes one of the following: 1) Documented administration of 2 doses of live mumps virus-containing vaccine; 2) Laboratory evidence of immunity, i.e. positive mumps immunoglobulin G (IgG) in serum; equivocal results should be considered negative; 3) Lab confirmation of disease; or 4) Born before 1957.¹ For practical reasons, Airmen accessions do not have childhood immunization histories transcribed into ASIMS. Rather, serologies against vaccine-preventable diseases are drawn. Since June 2013, individual measles, mumps and rubella antibodies have been drawn with 2 doses of MMR provided for new accessions who are seronegative for measles or mumps, and 1 dose of MMR for new accessions who are seronegative for rubella. The need to draw specific mumps antibodies has been validated by a recent Air Force study which showed only 88% of basic training recruits who were seropositive for both measles and rubella antibodies were also

¹ CDC. Prevention of Measles, Rubella, Congenital Rubella Syndrome, and Mumps, 2013: Summary Recommendations of the Advisory Committee on Immunization Practices (ACIP), MMWR 2013; 62 (RR-4): 1-34.

seropositive for mumps.² Of note, the only mumps containing vaccine licensed for use in adults and currently used by the Air Force is MMR. MMRV is licensed for individuals 12 months - 12 years old.

This updated Air Force mumps vaccination guidance addresses the current reality of a large number of Airmen who entered the Air Force prior to June 2013, who do not have objective evidence of positive mumps antibody, but were presumed to be seropositive for mumps at accession based on measles and rubella seropositivity. It also updates the policy for health care workers whose mumps immunization status will follow ACIP recommendations. It addresses policy and procedures for these four categories of Airmen and Airmen recruits, and health care workers: 1) New accessions; 2) Airmen with orders to deploy/PCS OCONUS (except Hawaii and Alaska); 3) Airmen currently CONUS/OCONUS and not scheduled to deploy/PCS OCONUS, 4) health care workers.

Unless superseded by Air Force or DoD policy, follow guidance in package inserts and from the CDC, which formally publishes recommendations from the Advisory Committee for Immunizations Practice (ACIP), for the administration of vaccines. Note that many vaccine manufacturers consider childhood to continue through age 18. In accordance with current ACIP recommendations, this guidance is an update to AFI 48-110_IP, *Immunization and Chemoprophylaxis for the Prevention of Infectious Disease*, 9 Oct 2013.

² Lewis PE, Burnett DG, Costello AA, Olsen CH, Tchandja JN, Webber BJ. Measles, mumps, and rubella antibody seroprevalence in a cohort of US Air Force recruits, 2013-14: below herd immunity thresholds? *Am J Prev Med.* 2015;49(5):757-760.