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|  | **OFFICE OF MARINE AND AVIATION OPERATIONS** | POLICY | VERSION |
| 1006 | 3.0 |
| EFFECTIVE DATE |
| November 13, 2023 |
| AUTHORIZED BY: | REVIEW DATE |
|  | **/s/ RADM Nancy Hann, NOAA** |  | November 13, 2028 |
| RESPONSIBLE POSITION |
|  | RADM Nancy Hann, NOAADirector, Office of Marine and Aviation Operations  | Director, Office of Health Services |

**IMMUNIZATIONS, COMMUNICABLE DISEASE PROTECTION, AND CHEMOPROPHYLAXIS**

1. **PURPOSE**
	1. This policy standardizes and consolidates all guidance governing immunizations and chemoprophylaxis for the National Oceanic and Atmospheric Administration (NOAA) fleet personnel to help protect them from communicable diseases.
	2. This version removes COVID-19 series requirements.
2. **SCOPE**

This policy applies to all sailing NOAA Corps officers, professional mariners, and all other persons embarked on NOAA ships.

1. **POLICY**
	1. General Immunizations (Appendix A)
		1. **Required** Immunizations, including boosters (Appendix 1)
			1. All sailing personnel must receive the following immunizations:
				1. Tetanus diphtheria (or tetanus, diphtheria, acellular pertussis)
				2. Measles, mumps, and rubella (MMR): persons born before 1957 are exempt
				3. Additional vaccinations and boosters may be required in the future (Section 4.6. herein).
			2. Steward Department personnel and others who regularly handle food onboard the ship must also receive the Hepatitis A immunization, 2 doses.
				1. New employees must receive the first dose before starting employment, unless they have a record of vaccination. The second dose must be received within 6 months of the first dose.
				2. Current employees must become fully vaccinated against hepatitis A within 12 months of the issuance of this policy.
			3. Medical personnel (officers, medical person in charge [MPIC], or personnel applying for MPIC training) must also receive the following immunizations:
				1. Hepatitis B, three doses
				2. Varicella (chicken pox): two doses; personnel with documented immunity are exempt, i.e., vaccination record or serologic evidence of immunity (a blood test for antibodies).
		2. **Recommended** Vaccinations (Appendix 1)
			1. Influenza, annually
			2. COVID-19, including primary series and boosters, as recommended by the CDC
			3. Pneumococcal, [if eligible](https://www.cdc.gov/vaccines/vpd/pneumo/public/)
			4. Varicella: for personnel who have not had chicken pox or been previously vaccinated
			5. Hepatitis A and B: for personnel who routinely have contact with human waste or anyone traveling to countries with poor sanitation
			6. Shingles, [for persons 50 years or older](https://www.cdc.gov/vaccines/vpd/shingles/public/shingrix/index.html)
		3. Reasonable Accommodations

Personnel may request a reasonable accommodation via waiver through their chain of command. If the waiver is granted, a medical officer will counsel the individual about the risk of not receiving the vaccination and document it in the individual’s health record.

* + 1. Any employee who intentionally alters, falsifies, or omits required immunizations can face disciplinary action, up to and including removal or termination.
	1. Foreign Travel Immunizations & Chemoprophylaxis
		1. All sailing personnel (including scientists and volunteers) must be current in the immunizations required for entry to a foreign port or as [recommended by the CDC](https://wwwnc.cdc.gov/travel).
		2. A ship’s Commanding Officer with a scheduled stop in a foreign port must contact the Director, Marine Medicine at least 60 days before departure to determine whether additional vaccines or chemoprophylaxis are necessary for the crew. The Director of Marine Medicine must provide a complete list of vaccine and chemoprophylaxis requirements within 15 days of the ship’s scheduled departure.
		3. Commanding Officers will notify personnel about vaccination requirements for foreign ports before departure.
		4. Emergency or last-minute changes in port calls will be handled on a case-by-case basis by the port delegates, U.S. State Department, and the ship’s commanding and medical officers.
		5. Personnel lacking required vaccinations to enter a foreign port may not be permitted to disembark by the foreign port authority.
		6. Malaria
			1. Indication for Use: to prevent infection with *Plasmodium,* the parasite that causes malaria. The Director of Marine Medicine will determine the specific chemoprophylactic regimens for the area of travel based on degree and length of exposure and the prevalence of drug-resistant strains of *Plasmodium* in the area(s) of travel.
			2. All sailing personnel will receive the chemoprophylactic regimen.
			3. The medical officer responsible for the ship formulary will ensure that the appropriate prophylactic agents are onboard ships with travel plans to areas with malaria. Personnel will be notified by Marine Medicine about these agents, one of which is the antibiotic doxycycline. Personnel allergic to doxycycline are advised to consult their primary care provider before sailing and bring an alternate antibiotic onboard ship.
		7. Yellow Fever
			1. Indication for Use: To prevent yellow fever disease, a viral infection that may cause severe systemic disease and organ failure. The virus that causes yellow fever infection is transmitted via the bite of an infected mosquito. Vaccination status must be verified to meet international health requirements to areas with endemic yellow fever. Areas of greatest risk are sub-Saharan Africa, tropical South America, and certain areas of the Caribbean.
			2. All sailing personnel: One dose of the yellow fever immunization is required at least 10 days before arriving in an area with endemic yellow fever. Travelers should consult their primary care provider if it has been 10 years or more since they were vaccinated. A booster dose of the vaccine may be required for certain locations. The CDC has information on [requirements for specific countries](https://wwwnc.cdc.gov/travel).
			3. Even if not required for foreign travel, sailing personnel older than 60 years should consult their healthcare provider to determine their risk-benefit profile for vaccination.
		8. Polio (IPV)
			1. Indication for Use: To prevent poliomyelitis, a viral infection that affects the central nervous system resulting in paralytic symptoms. Poliomyelitis is acquired by person-to-person transmission through the fecal-oral route. Sailing personnel deploying or traveling to areas with poor sanitation are at increased risk.
			2. If sailing personnel spend more than 4 weeks in a country with a high prevalence of polio infection, the polio immunization or 1 booster dose may be required to exit the country.
		9. Meningococcal Meningitis
			1. Indication for Use: To prevent meningococcal disease or meningitis and other systemic infections caused by the bacteria *Neisseria meningitidis* serogroups A, C, W–135, B, and Y.
			2. The meningococcal vaccine is recommended for sailing personnel traveling to countries where *N. meningitidis* is hyperendemic or epidemic and other countries, as recommended by the CDC.
		10. Typhoid Fever
			1. Indication for Use: To prevent typhoid fever, a systemic bacterial disease acquired by consuming food or water contaminated with *Salmonella typhi*, particularly during travel to areas with endemic typhoid or areas with poor sanitation.
			2. Recommended for sailing personnel traveling to areas with endemic typhoid or who may become exposed to local food and drink contaminated with *S. typhi*.
		11. Cholera

The cholera vaccine is not recommended for sailing personnel and not required for entry or exit from any country.

* + 1. Japanese Encephalitis

Mosquito avoidance is recommended in areas with endemic Japanese Encephalitis.

* + 1. Rabies prevention education will be provided by medical personnel to sailing personnel traveling to countries endemic with rabies.
		2. Plague

Indication for Use: There is currently no plague vaccination available for commercial use in the United States. Antibiotic treatment is available if sailing personnel are exposed to the plague, which is highly unlikely to occur at ports where NOAA sails.

* + 1. Anthrax

Indication for Use: Anthrax is a serious infection caused by the bacterium *Bacillus anthracis*. There is a vaccine that can help prevent it. It is available only for people at a high risk of exposure to *B. anthracis* or who have been exposed to it. Antibiotic treatment is available to treat sailing personnel exposed to anthrax; however, NOAA rarely sails to ports where anthrax is a concern.

1. **GUIDANCE**
	1. Verifying Vaccinations in New Hires
		1. Civilian New Hires
			1. Civilian Personnel Management Division (CPMD) will coordinate with Marine Medicine medical staff to schedule a physical examination for each potential new hire.
			2. During the new hire physical, a staff medical officer will review the candidate’s vaccination status for the required vaccines listed above.
			3. The staff medical officer will refer the candidate to this policy and advise them that additional vaccines may be required before employment begins or in the future.
			4. The CPMD notifies Marine Medicine medical staff that a candidate has been hired and assigned to a ship. Marine Medicine medical staff tracks the new employee’s vaccination status and corresponding vaccination dates in their medical readiness tracking tool (Appendix 2).
			5. The staff medical officer who performed the new employee’s physical will forward the required vaccination records to the shipboard medical officer onboard the employee’s assigned ship using the ship's medical email account ([ship]@noaa.gov).
		2. NOAA Corps Officer Candidates
			1. Office of Health Services (OHS), Chief of Medical Affairs, and medical officers assigned to Commissioned Personnel Center (CPC) will review NOAA Corps Military Entrance Processing Station physicals.
			2. After approving the candidate, the Chief of Medical Affairs will forward vaccination documentation to the Director of Marine Medicine.
	2. Verifying Vaccinations in Current Employees
		1. Civilian Employees
			1. Employees are responsible for maintaining current vaccinations and must comply promptly when requirements change.
			2. Employees must provide proof of vaccination to their staff medical officer. Staff medical officers will ensure these documents are complete and will update the staff medical readiness tracking system.
		2. NOAA Corps officers are responsible for maintaining vaccination documentation in their Official Personnel Files (Appendix B).
	3. Verifying Vaccinations in Other Personnel Sailing Overnight
		1. Anyone sailing overnight aboard ship, must complete and submit NOAA Form (NF) 57-10-01 –[NOAA Health Services Questionnaire](https://www.corporateservices.noaa.gov/noaaforms/eforms/nf57-10-01.pdf) and [NF 57-10-02 – Tuberculosis Screening](https://www.omao.noaa.gov/sites/default/files/documents/NOAA%20Form%2057-10-02%20%281-14%29%20Tuberculosis%20Screening%20Document.pdf) to their respective marine health services center 30 days in advance of sailing.
		2. The staff medical officer at the sailing personnel’s respective marine center will review section V of the NHSQ for vaccination compliance within 72 business hours of receipt. After the staff medical officer approves and signs the documents, they will store the documents in a secured network drive and email them to the individual’s assigned ship using the ship’s medical email account ([ship]@noaa.gov).
	4. Immunization Records
		1. All sailing personnel must maintain a personal immunization record and bring it onboard ship. If an immunization is administered by Marine Medicine staff, the medical officer who administers it will document it in the employee’s medical record, maintained in hard copy at Marine Operations Center-Atlantic, Marine Operations Center-Pacific, or digitally.
		2. The Director of Marine Medicine will provide the WHO-approved CDC Form 731 - *International Certificate of Vaccination* upon request.
		3. If the yellow fever immunization is provided to sailing personnel, it will be documented on the CDC Form 731 and stamped with an official Yellow Fever Immunization Center stamp.
		4. If proof of immunization is required for international sailing, each personnel’s CDC 731 must be maintained on the ship by the ship’s medical officer or MPIC.
	5. Annual Tuberculosis Screening and Testing Program
		1. Tuberculosis (TB) screening and testing is conducted annually by marine medical officers for all sailing personnel, per OMAO Policy 1008 - [*Tuberculosis Policy*](https://aodocs.altirnao.com/?locale=en_US&aodocs-domain=noaa.gov#Menu_viewDoc/LibraryId_RqF3cE49K0bsW4pRtk/ViewId_RqxtICe7MQW0MbP312/DocumentId_S5gh87My79kSEmUBec/ViewParams_%7B%22searchInSubFolders%22:false,%22userFilters%22:%5B%7B%22property%22:%22RqF4CAe0Gk7nEJqPlc%22,%22operator%22:%22EQUAL%22,%22values%22:%5B%22aRqF47vf0iAoXelYlIR%22%5D%7D%5D%7D). The medical officer who conducts the screening will complete Form NF 57-10-02 - *TB Screening* form and include it in the medical history file of the individual.
		2. The purpose of TB testing and screening is to identify sailing personnel at risk of exposure to TB and those with previous exposure to TB (i.e., latent tuberculosis infection [LTBI]). It will determine whether prophylactic therapy or periodic monitoring is required by the sailing personnel’s primary care provider.
		3. All personnel sailing aboard a NOAA ship must be free of TB symptoms and disease, or treated for LTBI, unless otherwise recommended by their primary care provider.
		4. All personnel with a newly positive LTBI test must report to their primary care provider for a chest X-ray and to determine whether prophylactic TB treatment is required, per CDC guidelines.
	6. Additional Required Vaccinations
		1. The Director of OHS will review vaccine requirements annually in August, or as necessary to meet current CDC recommendations, or per directive by Director of OMAO and the NOAA Corps.
		2. If the CDC recommends a vaccination for a declared public health emergency, this document will be revised, and new requirements will be implemented.
		3. Director of OMAO and NOAA Corps may impose additional vaccination requirements in an emergency. Requirements will be codified and distributed via signed memorandum and appended to this policy.

1. **RESPONSIBILITIES**
	1. Office of Health Services
		1. The Director of OHS is responsible for overseeing all five medical programs and establishing the specific immunization and chemoprophylaxis requirements in this document.
		2. The Director of Marine Medicine is responsible for determining the fitness for duty for all sailing personnel, (i.e., ensuring they meet medical readiness requirements).
			1. Sailing personnel that do not meet the minimum vaccination requirements will be deemed temporarily unfit for duty until they are fully vaccinated or obtain a waiver (Section 3.1.A).
			2. A staff medical officer is responsible for notifying the employee by U.S. mail and email of the employee’s temporary unfit for duty status. The medical officer will also notify the employee’s supervisor.
		3. Each ship’s medical officer or MPIC (for ships with no assigned medical officer) is responsible for ensuring that all sailing personnel have documentation of all required vaccinations and boosters before they sail. The ship’s medical officer or MPIC will notify the ship’s Commanding Officer and the Director of Marine Medicine of any sailing personnel with missing vaccine documents.
		4. The Chief, Medical Affairs within the CPC is responsible for determining the medical readiness of each NOAA Corps officer.
			1. Before commissioning, the Chief will review the officer candidate’s vaccination records.
			2. The Chief will also track booster vaccinations and seasonal influenza vaccination status as part of the NOAA Corps Officer’s periodic health assessment.
	2. Ships Command

The ship’s Commanding Officer is responsible for confirming with the Director of Marine Medicine that all embarked personnel are medically fit for duty before departure.

* 1. Chief Scientist

Chief scientists ensure that all members of their team have proper vaccination documentation. The Chief Scientist is responsible for sending the clearance documents to the director of Marine Medicine.

* 1. Employees and NOAA Corps Officers

All sailing personnel are responsible for maintaining medical readiness, including current vaccinations, per this policy.

1. **DEFINITIONS**

**Chemoprophylaxis** The prevention of infectious disease through the use of a chemical agent.

**Immunization** The administration of a substance (e.g., a vaccine) that results in immunity to a living organism that causes disease.

1. **REFERENCES**

<https://wwwnc.cdc.gov/travel/yellowbook/2020/preparing-international-travelers/yellow-fever-vaccine-and-malaria-prophylaxis-information-by-country/brazil#seldyfm879>

1. **AUTHORITY**

5 CFR § 339.205 - Medical Evaluation Programs

Department of Commerce, Department Organization Order 25-5

1. **NOTES**

Appendix A: Immunization Summary

Appendix B: Office of Health Services Tracking Tools for Immunization Status

Effect on Other Documents: Supersedes previous versions of OMAO Policy 1006 – *Immunizations, Communicable Disease Protection, and Chemoprophylaxis*.

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| **Document History** |
| **Version** | **Description of Change** | **Effective Date** |
| 3.0 | Removes COVID-19 series requirements | 11/13/2023 |
| 2.0 | Updates COVID-19 series requirements. | 5/8/2023 |
| 1.0 | Initial Document. | 4/15/2022 |

**Appendix A: Immunization & Chemoprophylaxis Summary**

| **Agent** | **Regimen** | **Requirement1** |
| --- | --- | --- |
| COVID-19 | 1 doses of the currently available Pfizer vaccine or1 doses of the currently available Moderna vaccine | **Recommended** COVID-19 vaccination for all persons sailing aboard a NOAA ship. (Subsequent boosters are recommended, timing in which to get a booster is per current CDC guideline). |
| Measles, Mumps,Rubella (MMR) | 2 doses given at least 1 month apart | **Required** for all persons sailing aboard a NOAA ship, except people born in 1957 or before; they are exempt |
| Tetanus Diphtheria (Td) **or**Tetanus Diphtheria acellular Pertussis (TdAP) | 1 dose every 10 years | **Required** for all persons sailing aboard a NOAA ship |
| Hepatitis A (HAV) | 2 doses given 6 months apart | **Required** for all persons working in the Steward Department or that regularly handle food for others aboard the ship**Recommended** for all others traveling to locations with poor sanitation |
| Hepatitis B (HAB) | 3 doses, Doses 2 and 3 are given at, 1, and 6 months after Dose 1 | **Required** for all medical officers and MPICs, and persons applying to the MPIC training course**Recommended** for personnel that routinely come in contact with human waste |
| Varicella(chicken pox) | 2 doses, 4 weeks apart | **Required** for all medical officers, certified MPICs and persons applying for MPIC training |
| Influenza | 1 dose, annually | **Recommended** for all persons sailing on NOAA ships |
| Pneumococcal | 1 or 2 doses, depending on age and health condition | **Recommended** for certain groups of people and persons over 65 years old. [See CDC recommendations](https://www.cdc.gov/vaccines/vpd/pneumo/public/) |
| Shingles (Recombinant zoster vaccine) | Shingrix: 2 doses, separated by 2–6 months | **Recommended** for people 50 years or older, [per CDC guidelines](https://www.cdc.gov/vaccines/vpd/shingles/public/shingrix/index.html) |
| Yellow Fever | 1 dose | May be required in certain locations Booster may be recommended 10 years after vaccination. Employees should consult their primary care provider. |
| Polio (IPV) | Booster, for those immunized in childhood | May be required to exit countries with high a prevalence of polio if personnel spent more than 4 weeks in that country |
| Meningococcal | 1 dose every 5 years | May be required for certain locations |
| Typhoid Fever | IM – 1 dose every 2 yearsOral – 4-capsule series every 5 years | May be required for certain locations |
| Malaria | Doxycycline2 and other agents, e.g., hydroxychloroquine3 | May be required for certain locations [per CDC guidelines](https://wwwnc.cdc.gov/travel/yellowbook/2020/travel-related-infectious-diseases/malaria) |

IM: intramuscular, MPIC: medical person in charge

1Vaccination requirements are subject to change per CDC guidelines or per Director, OMAO.

2Doxcyline is maintained in the shipboard formulary as needed for malaria. Personnel allergic to doxycycline should contact their primary care provider for an alternative antibiotic if they will be traveling to areas where malaria is endemic.

3Chemoprophylaxis agents will be chosen by the Director of Marine Medicine based on area and duration of travel.

**Appendix B: Office of Health Services**

Tracking Tools for Immunization Status

**Medical Readiness Tracking Tool**

Description: Tracks medical readiness data for all civilian employees, including vaccination data. Data is initially loaded during an individual’s new hire physical. The system sends out scheduled notices of anticipated expiring medical requirements to the individual and their immediate supervisor.

Who can access or use the tool

* Director, Marine Medicine uses the tool to determine clearance to sail for each sailing personnel based on medical readiness requirements.
* Shoreside staff medical officers and program support staff upload all records received by the employee into the system.
* Ship Commanding Officers and employee supervisors have view only access to monitor medical readiness.

**NOAA Health Services Questionnaire (NHSQ) Tracker**

Description: Spreadsheet that tracks NHSQ forms for all personnel (not already assigned to the ship) sailing aboard a NOAA ship.

Who can access or use the tracker

* Shoreside staff medical officers and program support staff are responsible for uploading all records to the tracker and sending records to the ship’s medical email account.

**Official Personnel File (OPF)**

Description: Personnel system that tracks medical readiness for all NOAA Corps Officers.

Who can access or use the system

* CPC Medical Affairs uploads initial medical data into the system.
* NOAA Corps officers are responsible for maintaining their OPF current.