

# Southern Hemisphere Influenza Vaccine Implementation Brief

**8 April 2020  
0900-1030 ET**



**"Medically Ready Force...Ready Medical Force"**

Pre-Decisional Deliberative Matter – For Official Use Only Within DoD

# Presenter: CAPT (Ret.) Jay Montgomery, MD



Dr. Jay Montgomery is a Board Certified Family Physician with specialty training in Allergy and Immunology. He received his medical training at Balboa Naval Hospital and Camp Pendleton Naval Hospital. He completed his Allergy & Immunology Fellowship at Walter Reed Army Medical Center. He is a Fellow of the American Academy of Family Physicians and the American Academy of Allergy, Asthma, and Immunology. Prior to Captain Montgomery's retirement from the United States Navy in 2007, he served as the Chief of the Allergy and Immunology Service, National Naval Medical Center and Specialty Leader for the Navy Surgeon General. He also served as Specialty Consultant to the White House Medical Unit from 2003 to 2016. Currently, he is the Director of the Defense Health Agency's Immunization Healthcare Branch's North Atlantic Region Vaccine Office. He is credentialed at the Walter Reed National Military Medical Center, Ft. Belvoir Community Hospital, and the Portsmouth Naval Medical Center. He has published in Allergy and Asthma Proceedings, the Journal of the American Academy of Dermatology, Neurology, the Journal of Clinical Infectious Diseases, Human Vaccines and Immunotherapeutics, Military Medicine, Navy Medicine, the CDC's Morbidity and Mortality Weekly Report (MMWR), the AFHSB's Medical Surveillance Monthly Report (MSMR), and Retina.

# Presenter: Tara Reavey, RN, BSN



Ms. Reavey is Chief of the Policy and Program Management section of the DHA Immunization Healthcare Branch. She received her Bachelor of Science in Nursing from Georgetown University. Ms. Reavey is a former Army Public Health Nurse and upon leaving the Army joined the Military Vaccine Agency. She has been with the organization since 2006, serving as the prior Chief of Education and Training to her current role today.

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# Learning Objectives



At the end of this activity, students will be able to:

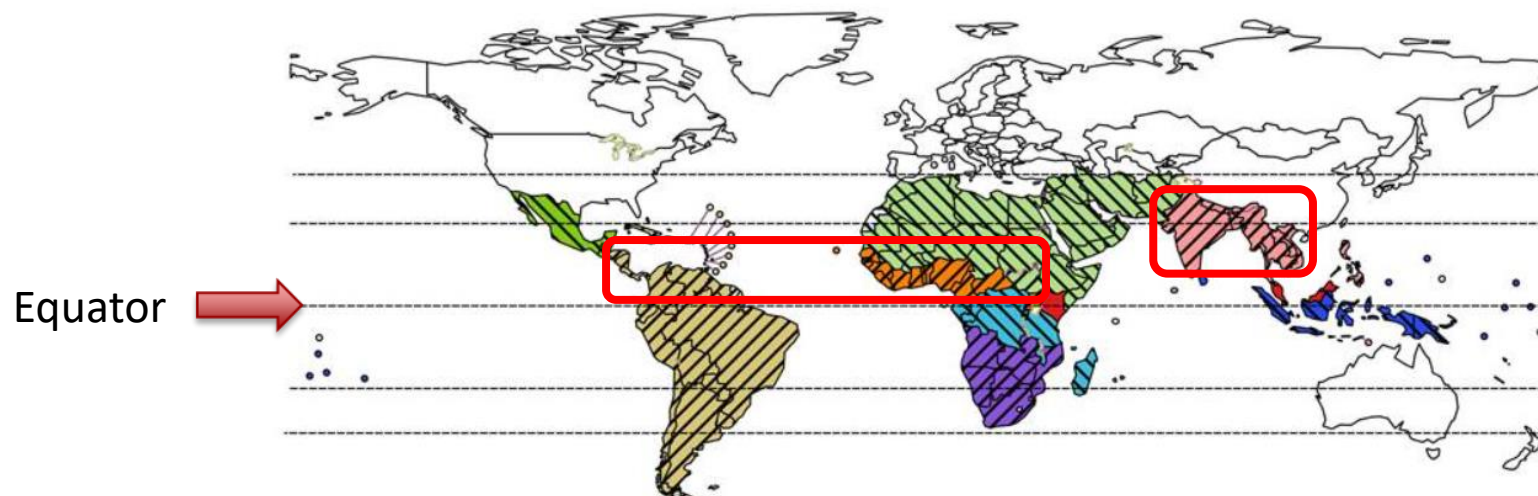
1. Explain the policy for the use of the new Southern Hemisphere (SH) influenza vaccine.
2. Differentiate the differences between the Southern and Northern Hemisphere vaccines.
3. Distinguish the circumstances when a Southern Hemisphere influenza vaccine may be recommended.
4. Outline the processes for Southern Hemisphere influenza vaccine administration, including changes in the screening form, the competency assessment, and standing orders.

# Why Are There Different Flu Vaccines?

- The influenza virus mutates continuously. The most common strains of the influenza virus around the world change 80-90% year to year.
- Flu is most common during the cooler months. Therefore in the Northern Hemisphere, the flu season is generally October - March, while in the Southern Hemisphere, the flu season is generally April - September.
- About 60% of the time for a given season, the strains most common in the Northern Hemisphere are not the same as what started out in the Southern Hemisphere.
- Flu vaccines are based upon our best estimate of which strains will be most common during each season. When the strains in the vaccine match the circulating strains, the flu vaccine is about 60% effective, but if one or more strains is mismatched in the vaccine, then the efficacy goes down.

# Northern and Southern Hemisphere Influenza Zones

## Influenza vaccine formulation



### Influenza Vaccination Zones

North America	Western Africa	Tropical Asia
South America	Equatorial Africa	Equatorial Asia
North Africa & Middle East	Southern Africa	Year-round

### Vaccine Formulation

SH
NH

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

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# Northern and Southern Hemisphere Influenza Zones



Vaccination Zone	Countries, areas or territories
Southern Hemisphere - South America (including part of Central America and parts of the Caribbean) *	Anguilla, Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia (Plurinational State of), Brazil, Cayman Islands, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, French Guiana, Grenada, Guyana, Haiti, Honduras, Montserrat, Netherlands Antilles, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Turks and Caicos Islands, Uruguay, Venezuela (Bolivarian Republic of)
Southern Hemisphere - Southern and Western Africa	Benin, Cabo Verde, Cameroon, Central African Republic, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Nigeria, Senegal, Sierra Leone, Togo, Uganda, Angola, Botswana, Mozambique, Namibia, South Africa, Zambia, Zimbabwe
Southern Hemisphere - Tropical Asia	Bangladesh, Bhutan, Cambodia, India, Laos, Maldives, Myanmar, Nepal, Philippines, Thailand, Timor-Leste, Viet Nam
Southern Hemisphere - Oceania	Australia, New Zealand

\* Cuba has been removed from the World Health Organization (WHO) country list for Southern Hemisphere vaccines. Due to the restricted access of personnel at Guantanamo Bay Cuba, they will not be required to receive the Southern Hemisphere vaccine but will be required to remain current for the Northern Hemisphere vaccine.



# Why the DoD implemented the Southern Hemisphere influenza vaccine



- Over the years, the Department of Defense (DoD) has been aware of a substantial number of influenza-like illnesses occurring among our service members and other participants in multi-nations exercises conducted in the Southern Hemisphere during SH flu season.
- Unfortunately, before the 2019 season, the DoD didn't have a Food and Drug Administration (FDA)-approved vaccine to provide to our service personnel and their families stationed in, or on Temporary Duty Assignment (TDY) to, the Southern Hemisphere during its flu season.
- In deploying this vaccine now, the DoD is mirroring the new Centers for Disease Control and Prevention (CDC) immunization guidelines. Before there was an FDA-approved SH vaccine, the CDC recommended using Northern Hemisphere (NH) vaccine if living in or going to the SH during SH flu season, even knowing the NH vaccine was not as effective.
- Travelers who want to reduce their risk for influenza infection should consider influenza vaccination, preferably at least 2 weeks before departure to optimize effectiveness upon arrival.

# Southern Hemisphere Influenza Vaccine Requirements and Recommendations



- Southern Hemisphere influenza vaccination is required for all Active Duty (AD), Reserve Component (RC), Guard members (and recommended for all other beneficiaries), permanently or temporarily assigned for at least 14 days between April through September to an area designated as a Southern Hemisphere influenza zone by the WHO.
  - Family members who are living in or on Permanent Change of Station (PCS) to the Southern Hemisphere are authorized to receive the Southern Hemisphere vaccine.
- Personnel traveling to the Southern Hemisphere between April and September should be vaccinated at least two weeks prior to entry into the region, if possible.

# Southern Hemisphere Influenza Vaccine Requirements and Recommendations

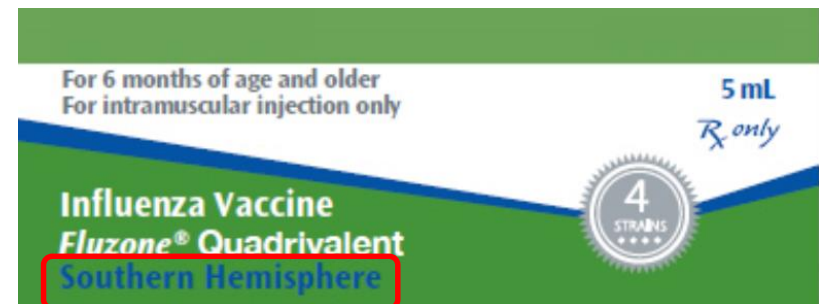


- Individuals can receive both the Southern and Northern Hemisphere influenza vaccines within a 12 month period if their travels take them into both hemispheres for longer than 14 days during the respective flu seasons. However, the two vaccines should be separated by 28 days.
- Personnel traveling/residing in the Northern Hemisphere for at least 14 days between October to March, and have not previously received the current seasonal Northern Hemisphere influenza vaccine, are required to receive a Northern Hemisphere vaccine in accordance with the most current Defense Health Agency-Interim Procedures Memorandum (DHA-IPM) for Northern Hemisphere seasonal influenza vaccination program.

# Fluzone® Southern Hemisphere Influenza Vaccine



- Sanofi Pasteur manufactures the only U.S. licensed Southern Hemisphere influenza vaccine, Fluzone® Quadrivalent – Southern Hemisphere, which received FDA licensure in 2018.
- While Southern Hemisphere Fluzone® Influenza vaccine might differ in viral composition from the Northern Hemisphere Fluzone® formulation (1 vaccine strain change ~40%; 2 strains change ~12%; 3 strain change ~5%), it otherwise contains the same components (preservatives, stabilizers, etc.) as the Northern Hemisphere Fluzone® vaccine.
- Other brands of Southern Hemisphere seasonal influenza vaccines are not licensed by the FDA and therefore not available in the United States.



MMWR / August 23, 2019 / Vol. 68 / No. 3

# Administration of the Southern Hemisphere Influenza Vaccine



- Screening, indications, contraindications, and administration of the southern hemisphere vaccine is identical to that of the northern vaccines.
- Screening for all influenza immunizations (children or adults, Northern or Southern vaccines) can be accomplished with the updated DHA 116 screening form available on our website.
  - New form can be filled out on a tablet, computer, or paper (including multicopy)
  - New form has check box for Northern and Southern Formulations of Fluzone
- Southern Hemisphere influenza vaccines may be administered concurrently with other inactivated or live vaccines (at different anatomic sites)

PEDIATRIC AND ADULT INFLUENZA SCREENING AND IMMUNIZATION DOCUMENTATION			
<b>PRIVACY KEY STATEMENT</b>			
Information supplied using this form is protected by the Privacy Act of 1974, as amended. The applicable systems of records are: ADD-66b OASD, Health Care and Medical Treatment Record System (April 4, 2003, 68 FR 16484) available at <a href="https://oasd.defense.gov/Privacy/SORNNameDoc-wide-SORN-Article-View/Article55977440050-66b-tag">https://oasd.defense.gov/Privacy/SORNNameDoc-wide-SORN-Article-View/Article55977440050-66b-tag</a> , and MDD-15-S, Medical Readiness Reporting System (August 23, 2016, 78 FR 52115) available at <a href="https://oasd.defense.gov/Privacy/SORNNameDoc-wide-SORN-Article-View/Article5704550m06155-S/">https://oasd.defense.gov/Privacy/SORNNameDoc-wide-SORN-Article-View/Article5704550m06155-S/</a> .			
The following questions will help us determine if we should give you the influenza vaccination today. If you answer "yes" to any questions, we will ask additional questions to determine which vaccine, if any, you will receive. Please speak to your healthcare provider if you have any questions.			
1. NAME (Last, First, Middle Initial)	2. DOD ID NUMBER (YYYYMMDD)	3. DATE OF BIRTH (YYYYMMDD)	4. AGE
5. DATE (YYYYMMDD)			
6. CATEGORY: <input type="checkbox"/> Service Member <input type="checkbox"/> Beneficiary <input type="checkbox"/> Civilian Contractor <input type="checkbox"/> Civilian GS/WS <input type="checkbox"/> Red Cross/Volunteer			
<b>PART I - COMPLETED BY PATIENT</b>			
(1) Are you currently sick, feel ill, or have a fever over 100°?			
(2) Have you had a serious reaction, other than flu-like symptoms, following an influenza vaccine in the past?			
(3) Have you ever experienced numbness or weakness of your arm or elsewhere (Guillain-Barre syndrome) within 6 weeks of receiving an influenza vaccine?			
(4) Have you ever had, or been treated for, an allergic reaction (hives, wheezing, and/or low blood pressure) to any vaccine, or do you have an allergy to any of the following: eggs, chicken, gelatin, MSG, Gentamicin, Neomycin, Polymyxin-B, Thimerosal, formaldehyde, latex, or other vaccine component?			
(5) If your child is between 6 months and 5 years of age, has your child received at least two (2) previous doses of influenza vaccine?			
(6) Have you received an influenza vaccine within the past 30 days?			
<b>7. ACKNOWLEDGMENT</b>			
I have read or have had explained to me the information in the current Influenza Vaccine Information Statement (VIS). I have also had a chance to ask questions, and they were answered to my satisfaction. I understand the benefits and risks of the influenza vaccine.			
a. NAME	b. SIGNATURE	c. DATE	
<b>PART II - COMPLETED BY SCREENER</b>			
8. ASSESSMENT		9. Vaccine Information Statement provided (see box)	
<input type="checkbox"/> Give inactivated flu vaccine today		<input type="checkbox"/> Inactivated Influenza Vaccine (IIV)	
<input type="checkbox"/> Do not administer flu vaccine today		10. SCREENER INFORMATION	
<input type="checkbox"/> Refer to experienced provider for further evaluation		a. NAME	
		b. SIGNATURE	
		c. DATE	
<b>PART III - COMPLETED BY VACCINATOR</b>			
11. VACCINE ADMINISTERED		12. LOT #	
<input type="checkbox"/> Afluria Quad (IIV4) 0.35ml (0.25mL) + 36 mcg (0.5 mL)		13. MANUFACTURER:	
<input type="checkbox"/> Fluzel (IIV3) + 65 mcg		14. EXPIRATION DATE: (YYYYMMDD)	
<input type="checkbox"/> Fluzel Quad (IIV4) + 6 mos		15. DOSE:	
<input type="checkbox"/> Fluzel Quad (IIV4) + 15 yrs		<input type="checkbox"/> 0.5 mL / <input type="checkbox"/> 0.25 mL	
<input type="checkbox"/> Fluzel Quad (IIV4) + 4 yrs		16. SITE:	
<input type="checkbox"/> Fluzel Quad (IIV4) + 6 mos <input type="checkbox"/> Northern <input type="checkbox"/> Southern		<input type="checkbox"/> Deltoid / <input type="checkbox"/> Thigh	
<input type="checkbox"/> Fluzone - HD (IIV4-HD) + 65 yrs		<input type="checkbox"/> Left / <input type="checkbox"/> Right	
<input type="checkbox"/> Other		OR PLACE STICKER HERE:	
17. COMMENTS:			
18. ADMINISTERED BY:		19. DATE (YYYYMMDD)	
ASIMS / MEDPROS / MRSs Entry			
20. NAME:		21. DATE (YYYYMMDD)	

DHA FORM 116, FEB 2020 PREVIOUS EDITION IS OBSOLETE. Page 1 of 2

# Administration of the Southern Hemisphere Influenza Vaccine



- Adverse reactions: Local reactions are common after administration of either Fluzone formulation. Reactions include soreness (67%), redness (34%) and swelling (25%) and generally last 1-2 days. Systemic reactions include fever  $>100.4^{\circ}\text{F}$  (7%), headache (23%), malaise (32%), and muscle aches (39%). Hypersensitivity (allergy) to vaccine components is rare, but may occur.
- Pregnancy
  - Another FDA/Advisory Committee on Immunization Practices (ACIP) disconnect:
    - FDA- Fluzone Quadrivalent should be given to a pregnant woman only if clearly needed.
    - ACIP - pregnant women should get an influenza vaccine during any trimester of their pregnancy

# Administration of the Southern Hemisphere Influenza Vaccine



- Only appropriately trained and qualified medical personnel working within their scope of practice, upon the order (including standing orders) of an appropriately privileged healthcare provider, will administer the influenza vaccine.
  - Joint Knowledge Online (JKO) training (for NH vaccine) counts for administering SH vaccine
  - On-site training provided by a Regional Vaccine Safety Hub
  - The Influenza Immunization Competency Assessment form has been amended to read:
    - Vaccine Administration Procedures: Selects appropriate influenza product based on age, time of year and geographic location (NH/SH), and screening of patient. NOTE: For individuals in the NH between Oct & Mar, any age appropriate influenza formulation may be use. For those who will be in the SH between Apr & Sep, Fluzone SH, if available, is appropriate.



# Administration of the Southern Hemisphere Influenza Vaccine



- Standing Orders have been amended to read:
  - All eligible individuals are recommended to receive influenza vaccination each year based upon their geographic exposure during respective influenza season in the Northern Hemisphere or the Southern Hemisphere.
- Individuals will be provided the current Influenza Vaccine Information Statement (VIS) from the CDC. The VIS covers both the Northern and Southern Hemisphere injectable vaccines.
- Personnel who remain in the Southern Hemisphere during the Northern Hemisphere influenza season will not be required to receive the Northern Hemisphere influenza vaccine.

# Administration of the Southern Hemisphere Influenza Vaccine



- Fluzone®, Quadrivalent, Northern and Southern Hemisphere
- Route: Intramuscular
- Dosing:

Age	Dose	Series and Spacing
6-35 Months	0.25 or 0.5 mL	1 or 2 doses* 4 weeks apart
36 Months – 8 Years	0.5mL	1 or 2 doses* 4 weeks apart
9 Years and older	0.5mL	

\* Children 6 months through 8 years old may need two doses, depending on their vaccination history. Two doses are needed for children receiving influenza vaccine for the first time and for any child who has not received two doses of vaccine prior to the end of the last influenza season (even if given in different seasons). The interval between the two doses should be at least four weeks.

# Southern Hemisphere Influenza Vaccine DHA-IPM Ordering, Distribution, & Cold Chain Management



- All routine vaccine cold chain procedures remain the same for the Southern Hemisphere vaccine
  - Fluzone®, Quad Southern Hemisphere vaccine is a refrigerated product and must be stored at 2° to 8° C
  - For references for proper cold chain and off site immunizations please see the DHA Immunization Healthcare Division (IHD) webpage for further information
  
- All orders for Southern Hemisphere influenza vaccine must be placed through the respective Service Medical Logistics Influenza coordinators utilizing the same format for ordering Northern Hemisphere influenza vaccine
  - Priority for vaccine shipments will be for overseas locations and for units deploying to the Southern Hemisphere. Vaccine supplies will be monitored and released accordingly.

# Southern Hemisphere Influenza Vaccine DHA-IPM Documentation



- All IMR systems and electronic medical records have been provided the Vaccine Administered (CVX) code for Southern Hemisphere vaccination documentation. Systems are working to load the code and program the logic for it to reflect in the various location requirements.
- CVX Code 194, Influenza, Southern Hemisphere, unspecified will be used to document Fluzone® Quad Southern Hemisphere pre-filled syringes.
  - Accurate documentation of the correct code is critical for the various systems to compute medical readiness
  - Code 194 should be reflected in immunization records as Southern Hemisphere Influenza
- Individuals in the Southern Hemisphere will remain medically ready if they have a documented SH vaccine and will not be required to receive the Northern Hemisphere vaccine, unless traveling to NH.

# Key Takeaways



- Southern Hemisphere (SH) influenza vaccination is required for all AD, RC, NG members (and recommended for all other beneficiaries), permanently or temporarily assigned for at least 14 days between April through September to an area designated as a SH influenza zone by the World Health Organization.
- Individuals can receive both the SH and NH influenza vaccines within a 12 month period. However, the two vaccines should be separated by 28 days.
- Personnel who remain in the SH during the NH influenza season will not be required to receive the NH influenza vaccine.
- All orders for SH influenza vaccine must be placed through the Service Medical Logistics Influenza vaccine coordinators utilizing the same format as ordering NH influenza vaccine.
- CVX Code 194, Influenza, Southern Hemisphere, unspecified will be used to document Fluzone® Quad Southern Hemisphere pre-filled syringes.

# Questions?

Please send any questions pertaining to Southern Hemisphere Influenza Vaccine to  
**[dodvaccines@mail.mil](mailto:dodvaccines@mail.mil)**

# References



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# How to Obtain CE/CME Credit



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3. Click on the REGISTER/TAKE COURSE tab.
  - a. If you have previously used the CEPO CMS, click login.
  - b. If you have not previously used the CEPO CMS click register to create a new account.
4. Enter the Access Code: **FLU0408**
5. Follow the onscreen prompts to complete the post-activity assessments:
  - a. Read the Accreditation Statement
  - b. Complete the Evaluation
  - c. Take the Posttest
6. After completing the posttest at 80% or above, your certificate will be available for print or download.
7. You can return to the site at any time in the future to print your certificate and transcripts at <https://www.dhaj7-cepo.com/>
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