

VACCINE MANAGEMENT — Recommendations for Storage and Handling of Selected Biologicals

(These recommendations are not a substitute for the package insert included with each different biologic.)

- DT - Pediatric: Diphtheria, Tetanus Toxoids
- Td - ≥7 yrs: Tetanus, Diphtheria Toxoid

Shipping Requirements:
Must be shipped in insulated container. Maintain temperature at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Condition upon Arrival*:
Refrigerate upon arrival. **Do not freeze or expose to freezing temperatures.**
* If you have any questions about the condition of the vaccine at the time of delivery, you should:
1) immediately place vaccine in recommended storage; and
2) notify your responsible entity.

Storage Requirements:
Refrigerate immediately upon arrival. Store at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Shelf Life:
Check expiration date on vial, container or manufacturer-filled syringe. **DO NOT** use after the expiration date shown on the label.

Instructions for Use:
Shake well to obtain a uniform, white

cloudy suspension before withdrawal and use. Administer intramuscularly.

Shelf Life after Opening:
The vaccine should be administered shortly after withdrawal from the vial.

Special Instructions:
Rotate stock so that the vaccine with the shortest expiration date is used first.

- MMRV: Measles/Mumps/Rubella/Varicella Vaccine
- Varicella (Chickenpox) Vaccine

Shipping Requirements:
Vaccine: Use transport container that maintains temperature between -58°F and +5°F (-50°C and -15°C). **DO NOT** ship with dry ice. Must be delivered within 3 days of shipment. **Diluent:** Must be shipped with vaccine. **DO NOT** store diluent in freezer.

Condition upon Arrival*:
Must be stored frozen at a temperature between -58°F and +5°F (-50°C and -15°C) until reconstituted for injection.
* If you have any questions about the condition of the vaccine at the time of delivery, you should:
1) immediately place vaccine in proper storage; and
2) notify your responsible entity.

Storage Requirements:
Vaccine: Store in freezer immediately

upon arrival. Maintain vaccine in a continuously frozen state between -58°F and +5°F (-50°C and -15°C) or colder. *Protect from light at all times.*
Diluent: May be refrigerated or stored at room temperature 68° to 77°F (20° to 25°C). **Do not freeze or expose to freezing temperatures.**

Shelf Life:
Check expiration date on vial or container. **DO NOT** use after the expiration date shown on the label.

Instructions for Reconstitution and Use:
Reconstitute just before using. Use only the diluent supplied to reconstitute the vaccine. Follow manufacturer's directions. Administer subcutaneously.

Shelf Life after Reconstitution, Thawing, or Opening:
Administer within 30 minutes of reconstitution.

Special Instructions:
If this vaccine is stored at a temperature warmer than 5°F (-15°C), it will result in a loss of potency and a reduced shelf life. If a power outage or some other situation occurs that results in the vaccine storage temperature rising above the recommended temperature, the clinic staff must contact the responsible entity before using the vaccine.

Rotate stock so that the vaccine with the shortest expiration date is used first.

NOTE: All materials used for administering live virus vaccines should be disposed of properly.

- DTaP - Pediatric: Diphtheria Toxoid, Tetanus Toxoid, Acellular Pertussis Vaccine
- DTaP-IPV – Pediatric: Diphtheria Toxoid, Tetanus Toxoid, Acellular Pertussis Vaccine, Inactivated Polio Vaccine
- DTaP-IPV-Hib - Pediatric: Diphtheria Toxoid, Tetanus Toxoid, Acellular Pertussis Vaccine, Inactivated Polio Vaccine with Haemophilus influenzae type b Conjugate vaccine
- DTaP-HepB-IPV - Pediatric: Diphtheria Toxoid, Tetanus Toxoid, Acellular Pertussis Vaccine, Hepatitis B Vaccine, Inactivated Polio Vaccine
- Tdap - ≥ 7yrs: Tetanus Toxoid, Diphtheria Toxoid, Acellular Pertussis Vaccine

Shipping Requirements:
Must be shipped in insulated container. Maintain temperature at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Condition upon Arrival*:
Refrigerate upon arrival. **Do not freeze or expose to freezing temperatures.**
* If you have any questions about the condition of the vaccine at the time of delivery, you should:
1) immediately place vaccine in recommended storage; and
2) notify your responsible entity.

Storage Requirements:
Refrigerate immediately upon arrival. Store at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Shelf Life:
Check expiration date on vial,

container, or pre-filled syringe. **DO NOT** use after the expiration date shown on the label.

Instructions for Use:
Just before use, shake the vial or syringe well until a uniform, white, cloudy suspension results. If particulate matter and/or discoloration exists, do not use. Administer intramuscularly.

Shelf Life after Reconstitution or Opening:**
Single-Dose Vials: The vaccine should be administered shortly after withdrawal from the vial.
Pre-Filled Syringes: The vaccine should be administered shortly after the needle is attached to the syringe.

** Pentacel®: Reconstitute the ActHIB vaccine component with the DTaP-IPV component immediately before administration.

Do not mix with any other vaccine or diluent.

Just prior to use, thoroughly but gently shake the vial of DTaP-IPV component, withdraw the entire liquid contents and inject into the vial of the lyophilized ActHIB component. Gently swirl the vial now containing Pentacel until a cloudy, uniform, white-to-off-white (yellow tinge) suspension results.

DO NOT use after expiration date shown on the label.

Special Instructions:
Rotate stock so that the vaccine with the shortest expiration date is used first.

Hepatitis Vaccines: Hepatitis A, Hepatitis B, and Hepatitis A-B

Shipping Requirements:
Must be shipped in insulated container. Maintain temperature at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Condition upon Arrival*:
Refrigerate upon arrival. **Do not freeze or expose to freezing temperatures.**
* If you have any questions about the condition of the vaccine at the time of delivery, you should:
1) immediately place vaccine in recommended storage; and
2) notify your responsible entity.

Storage Requirements:
Refrigerate immediately upon arrival. Store at 36° to 46°F (2° to 8°C).

Shelf Life:
Check expiration date on vial,

Do not freeze or expose to freezing temperatures.

Shelf Life:
Check expiration date on vial or pre-filled syringe. **DO NOT** use after the expiration date shown on the label.

Instructions for Use:
Shake well to obtain a slightly opaque, white suspension before withdrawal and use. Thoroughly agitate to maintain suspension of the vaccine. Discard if the suspension does not appear homogenous, if extraneous particulate matter remains, or if discoloration is observed. Administer intramuscularly.

Shelf Life after Opening:
Single-Dose Vials:
Use: The vaccine should be administered shortly after withdrawal from the vial.

Pre-Filled Syringes:
The vaccine should be administered shortly after the needle is attached to the syringe. Administer the entire dose.

Special Instructions:
Rotate stock so that the vaccine with the shortest expiration date is used first.

MCV4: Meningococcal Conjugate Vaccine: Serogroups A, C, Y, W-135

Shipping Requirements:
Must be shipped in insulated container. Maintain temperature at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Condition upon Arrival*:
Refrigerate upon arrival. **Do not expose to freezing temperatures.**
* If you have any questions about the condition of the vaccine at the time of delivery, you should:
1) immediately place vaccine in recommended storage; and
2) notify your responsible entity.

Storage Requirements:
Refrigerate immediately upon arrival. Store at 36° to 46°F (2° to 8°C). **Do not freeze. Protect from light.**

Shelf Life:
Check expiration date on vial or container. **DO NOT** use after the expiration date shown on the label.

Special Instructions for Reconstitution of MENVEO®:
MENVEO is supplied in two vials that must be combined prior to reconstitution. Withdraw the entire contents of the vial of MENCYW-135 liquid conjugate vaccine component and inject into the MENA lyophilized conjugate vaccine component vial. Invert the vial and shake well until the vaccine is dissolved and then withdraw 0.5mL of reconstituted product.

Following reconstitution, the vaccine is a clear, colorless solution, free

from visible foreign particles. For intramuscular injection only.

Instructions for Use of Menactra®:
Menactra does not require reconstitution. Menactra vaccine is a clear to slightly turbid liquid.

Shelf Life after Opening:
The vaccine should be administered shortly after withdrawal from the vial.

Special Instructions:
Vaccine should be injected by the intramuscular route.

Rotate stock so that the vaccine with the shortest expiration date is used first.

Hib: Haemophilus influenzae type b Conjugate Vaccine

Shipping Requirements:
Must be shipped in insulated container. Maintain temperature at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Condition upon Arrival*:
Refrigerate upon arrival. **Do not freeze or expose to freezing temperatures.**
* If you have any questions about the condition of the vaccine at the time of delivery, you should:
1) immediately place vaccine in recommended storage; and
2) notify your responsible entity.

Storage Requirements:
Refrigerate immediately upon arrival. Store at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

ActHIB: Store lyophilized vaccine packaged with saline diluent at 36° to 46°F (2° to 8°C).
Hiberix: Store lyophilized vaccine vials between 36° to 46°F (2° to 8°C). Protect vials from light.

Diluent - Store refrigerated between 36° to 46°F (2° to 8°C) or in a controlled room temperature between 68° and 77°F. Do not use if the diluent has been frozen.
PedvaxHIB: Store liquid vaccine at 36° to 46°F (2° to 8°C). Liquid PedvaxHIB is ready to use, not requiring a diluent; it is a slightly opaque white suspension.

Shelf Life:
Check expiration date on vial or container. **DO NOT** use after the expiration date shown on the label.

Instructions for Reconstitution and Use:
Hiberix® is to be reconstituted only with the accompanying saline diluent. Inject the entire volume of sterile diluent contained in the vial or syringe into the vial of lyophilized vaccine. Thorough agitation is advised to ensure complete reconstitution. The entire volume of reconstituted vaccine is then

drawn back into the syringe. The vaccine will appear clear and colorless intramuscularly.

PedvaxHIB®: Shake well before withdrawal and use. Thorough agitation is necessary to maintain suspension of the vaccine.
ActHIB® should be used within 24 hours of reconstitution. Use only the diluent shipped with the product to reconstitute.

Shelf Life after Reconstitution or Opening:
The vaccine should be administered shortly after withdrawal from the vial.

Special Instructions:
Rotate stock so that the vaccine with the shortest expiration date is used first.

Shipping Requirements:
Must be shipped in insulated container. Maintain temperature at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Condition upon Arrival*:
Refrigerate upon arrival. **Do not freeze or expose to freezing temperatures.**
* If you have any questions about the condition of the vaccine at the time of delivery, you should:
1) immediately place vaccine in recommended storage; and
2) notify your responsible entity.

Storage Requirements:
Refrigerate immediately upon arrival.

Store at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Shelf Life:
Check expiration date on vial or pre-filled syringe. **DO NOT** use after the expiration date shown on the label.

Instructions for Use:
Bexsero®:
Shake syringe before use to form a homogenous suspension. Do not use if it cannot be resuspended. Inspect for particulate matter and discoloration prior to administration; do not use if any found. Administer intramuscularly

Trumenba®: Shake vial vigorously to ensure that a homogenous white suspension of Trumenba is obtained. Do not use if it cannot be resuspended. Inspect for particulate matter and discoloration prior to administration; do not use if any found. Administer intramuscularly

Shelf Life after Opening:
Administer within 30 minutes of reconstitution.

Special Instructions:
Rotate stock so that the vaccine with the shortest expiration date is used first.

PCV13: Pneumococcal Conjugate Vaccine (13-Valent)

Shipping Requirements:
Must be shipped in insulated container. Maintain temperature at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Condition upon Arrival*:
Refrigerate upon arrival. **Do not freeze or expose to freezing temperatures.**
* If you have any questions about the condition of the vaccine at the time of delivery, you should:
1) immediately place vaccine in recommended storage; and
2) notify your responsible entity.

Storage Requirements:
Refrigerate immediately upon arrival. Store at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Shelf Life:
Check expiration date on vial or container. **DO NOT** use after the expiration date shown on the label.

Instructions for Use:
Vaccine should appear as a homogenous white suspension after vigorous shaking. Administer intramuscularly.

Shelf Life after Opening:
The vaccine should be administered shortly after withdrawal from the vial.

Special Instructions:
This vaccine is a suspension containing adjuvant and should not be used if the particles cannot be resuspended after vigorous shaking. Do not use if particulate matter or discoloration is found.

Rotate stock so that the vaccine with the shortest expiration date is used first.

PPSV23: Pneumococcal Polysaccharide Vaccine (Polyvalent)

Shipping Requirements:
Must be shipped in insulated container. Maintain temperature at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Condition upon Arrival*:
Refrigerate upon arrival. **Do not freeze or expose to freezing temperatures.**
* If you have any questions about the condition of the vaccine at the time of delivery, you should:
1) immediately place vaccine in recommended storage; and
2) notify your responsible entity.

Storage Requirements:
Refrigerate immediately upon arrival. Store at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Shelf Life:
Check expiration date on vial or container. **DO NOT** use after the expiration date shown on the label.

Instructions for Use:
Follow manufacturer's directions. Administer either intramuscularly or subcutaneously.

Shelf Life After Opening:
Single-Dose Vials: The vaccine should be administered shortly after withdrawal from the vial. A clear, colorless solution.

Multi-dose Vials: Unused portions of multi-dose vials should be refrigerated at 36° to 46°F (2° to 8°C) and used until expiration date is reached, if not contaminated.

Special Instructions:
Rotate stock so that the vaccine with the shortest expiration date is used first.

Rotavirus Vaccine

FOR ORAL USE ONLY. DO NOT INJECT. Administer dose by gently squeezing liquid into infant's mouth toward the inner cheek until dosing tube is empty.

Shipping Requirements:
Must be shipped in insulated container. Maintain temperature at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Condition upon Arrival*:
Refrigerate upon arrival. **Do not freeze or expose to freezing temperatures.**
* If you have any questions about the condition of the vaccine at the time of delivery, you should:
1) immediately place vaccine in recommended storage; and
2) notify your responsible entity.

Do not freeze or expose to freezing temperatures.

Shelf Life:
Check expiration date on tube or container. **DO NOT** use after the expiration date shown on the label.

Instructions for Use:
ROTARIX:
Vials: Store vials of lyophilized ROTARIX refrigerated at 36° to 46°F (2° to 8°C). **Protect from light.**
Diluent: The diluent may be stored at a controlled room temperature 68° to 77°F (20° to 25°C). Do not freeze. Do not use if the diluent has been frozen.

Administer within 24 hours of reconstitution. It may be stored refrigerated at 36° to 46°F (2° to 8°C) after reconstitution. Do not use the reconstituted vaccine if not used within 24 hours. **Protect from light.**

Special instructions for ROTARIX Reconstitution: Remove vial cap and push transfer adapter onto vial (lyophilized vaccine). Shake diluent in oral applicator (white, turbid suspension). Connect oral applicator to transfer adapter. Push plunger of oral applicator to transfer diluent into vial. Suspension will appear white and turbid. Withdraw vaccine into oral applicator. Twist and remove the oral applicator.

RotaTeq: Ready-to-use liquid dose that is a pale, yellow clear liquid that may have a pink tint.

Special instructions:
Rotate stock so that the vaccine with the shortest expiration date is used first.

HPV: Human Papillomavirus Vaccine

Shipping Requirements:
Must be shipped in insulated container. Maintain temperature at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Condition upon Arrival*:
Refrigerate upon arrival. **Do not freeze or expose to freezing temperatures.**
* If you have any questions about the condition of the vaccine at the time of delivery, you should:
1) immediately place vaccine in recommended storage; and
2) notify your responsible entity.

Storage Requirements: Refrigerate immediately upon arrival. Store at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Shelf Life:
Check expiration date on vial or container. **DO NOT** use after the expiration date shown on the label.

Special Instructions for Use:
Shake well before use. Thorough agitation immediately before administration is necessary to maintain suspension of the vaccine. After thorough agitation, vaccine is a white, cloudy liquid. Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration. Do not use the product if particulates are present or if it appears discolored.

Instructions for Use:
Follow manufacturer's directions. Administer intramuscularly.

Administer as soon as possible after being removed from refrigeration. **Protect from light.**

Shelf Life after Opening:
Use until expiration date is reached.

Special Instructions:
Rotate stock so that the vaccine with the shortest expiration date is used first.

Influenza Vaccine Inactivated or Recombinant

Shipping Requirements:
Must be shipped in insulated container. Maintain temperature at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Condition upon Arrival*:
Refrigerate upon arrival. **Do not freeze or expose to freezing temperatures.**
* If you have any questions about the condition of the vaccine at the time of delivery, you should:
1) immediately place vaccine in recommended storage; and
2) notify your responsible entity.

Store at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Shelf Life:
Formulated for use during current influenza season. Check expiration date on vial or pre-filled syringe. **DO NOT** use after the expiration date shown on the label.

Instructions for Use:
Shake the syringe or single-dose vial before administering the vaccine. Shake the multi-dose vial each time before withdrawing the vaccine. Administer intramuscularly.

Shelf Life after Opening:
Multi-dose Vials: The vaccine should be administered shortly after withdrawal from the vial. Unused portions of multi-dose vials should be refrigerated at 36° to 46°F (2° to 8°C) and used until expiration date is reached.

Special Instructions:
Rotate stock so that the vaccine with the shortest expiration date is used first.

IPV: Inactivated Polio Vaccine

Shipping Requirements:
Must be shipped in insulated container. Maintain temperature at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Condition upon Arrival*:
Refrigerate upon arrival. **Do not freeze or expose to freezing temperatures.**
* If you have any questions about the condition of the vaccine at the time of delivery, you should:
1) immediately place vaccine in recommended storage; and
2) notify your responsible entity.

Storage Requirements:
Refrigerate immediately upon arrival. Store at 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Shelf Life:
Check expiration date on vial or container. **DO NOT** use after the expiration date shown on the label.

Instructions for Use:
Multi-dose Vials: Shake vial vigorously before withdrawal and use. Follow manufacturer's directions. Administer intramuscularly or subcutaneously.

Shelf Life after Opening:
The vaccine should be administered shortly after withdrawal from the vial.
Multi-dose Vials: Unused portions of multi-dose vials should be refrigerated at 36° to 46°F (2° to 8°C) and used until expiration date is reached.

Special Instructions:
Rotate stock so that the vaccine with the shortest expiration date is used first.

LAIV: Live Attenuated Influenza Vaccine

Shipping Requirements:
Must be shipped in insulated container. Maintain temperatures between 36° to 46°F (2° to 8°C). **Do not freeze or expose to freezing temperatures.**

Condition upon Arrival*:
Refrigerate upon arrival.
*If you have any questions about the condition of the vaccine at the time of delivery, you should:
1) immediately place vaccine in recommended storage; and
2) notify your responsible entity for guidance.

Storage Requirements:
Refrigerate immediately upon arrival. Store at 36° to 46°F (2° to 8°C). **Do**

Do not freeze or expose to freezing temperatures.

Shelf Life:
Formulated for use during current influenza season. Check expiration date on container. **DO NOT** use after the expiration date shown on the label.

Instructions for Use:
LAIV is a colorless to pale yellow liquid and is clear to slightly cloudy. After removal of the sprayer from the refrigerator, remove the rubber tip protector.

For intranasal administration only. **DO NOT** inject. **DO NOT** use a needle. Follow manufacturer's instructions

to deliver 1/2 dose into one nostril. Then remove the dose-divider clip and deliver the remainder of the dose into the other nostril.

Shelf Life after Opening:
The vaccine should be administered shortly after removal from the refrigerator.

Special Instructions:
Rotate stock so that vaccine with the shortest expiration date is used first.

NOTE: All vaccine materials should be disposed of using medical waste disposal procedures.

- MMR: Measles/Mumps/Rubella Vaccine
- MR: Measles/Rubella Vaccine
- Measles Virus Vaccine
- Mumps Virus Vaccine
- Rubella Virus Vaccine

Shipping Requirements:
Vaccine: Must be shipped in insulated container. Maintain temperatures between -58°F and +46°F (-50°C and +8°C). **DO NOT** use dry ice as it may subject vaccine to temperatures colder than -58°F (-50°C).
Diluent: Shipped with vaccine but not frozen.

Condition upon Arrival*:
Maintain at -58°F and +46°F (-50°C and +8°C). Refrigerate or freeze upon arrival.
* If you have any questions about the condition of the vaccine at the time of delivery, you should:
1) immediately place vaccine in recommended storage; and
2) notify your responsible entity.

Storage Requirements:
Vaccine may be stored in a refrigerator or freezer.

Diluent may be stored at room temperature or in a refrigerator. Do not freeze diluent.
Vaccine: Refrigerate or freeze immediately upon arrival. Store at -58°F and +46°F (-50°C and +8°C). Protect from light at all times.
Diluent: May be refrigerated or stored at room temperature 68° to 77°F (20° to 25°C). Do not freeze diluent or expose to freezing temperatures.

NOTE: Freeze-dried (lyophilized) MMR vaccine may be maintained at freezer temperatures.
Shelf Life:
Check expiration date on vial or container. **DO NOT** use after the expiration date shown on the label.

Instructions for Reconstitution and Use:
Reconstitute just before administering. Use only the diluent supplied to

reconstitute the vaccine. Inject diluent into the vial of lyophilized vaccine and agitate to