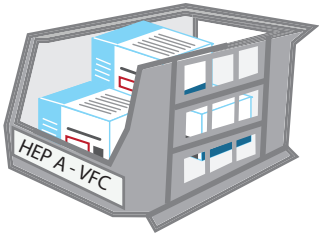


# Storage Best Practices for Refrigerated Vaccines—Fahrenheit (F)

## 1 Unpack vaccines immediately



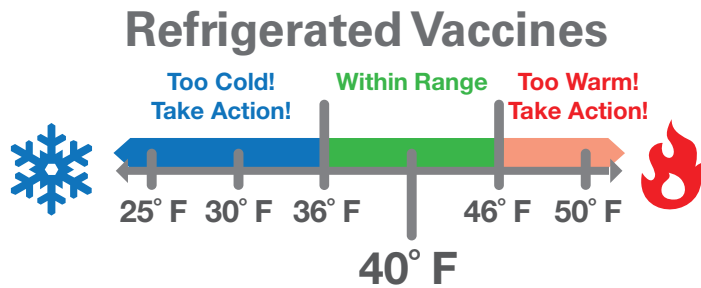
1. Place the vaccines in trays or containers for proper air flow.
2. Put vaccines that are first to expire in front.
3. Keep vaccines in original boxes with lids closed to prevent exposure to light.
4. Separate and label by vaccine type and public (VFC) or private vaccine.

## 2 Store vaccines at ideal temperature: 40° F



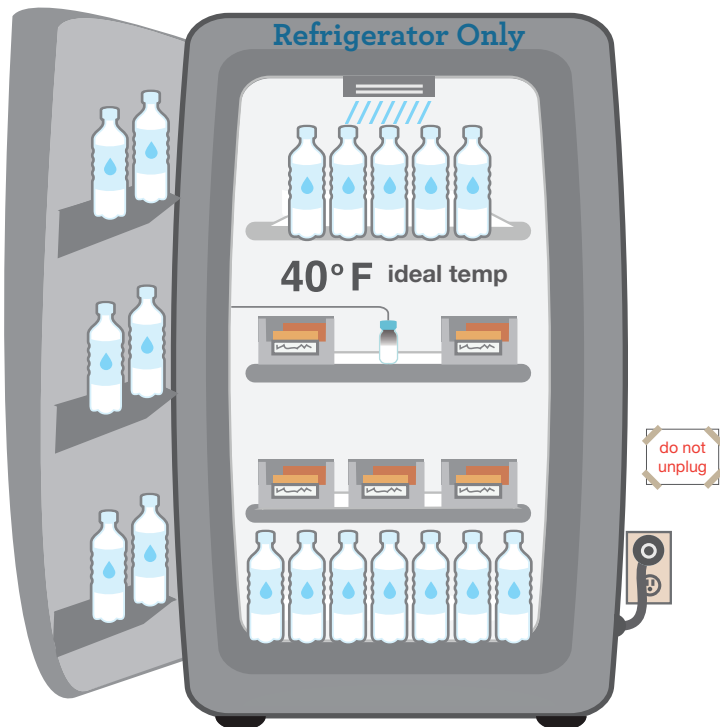
**Never freeze refrigerated vaccines!**

Exception: MMR can be stored in refrigerator or freezer



**Report out-of-range temperatures immediately!**

## 3 Use vaccine storage best practices



### DO

- ✓ Do make sure the refrigerator door is closed!
- ✓ Do replace crisper bins with water bottles to help maintain consistent temperature.
- ✓ Do label water bottles "Do Not Drink."
- ✓ Do leave 2 to 3 inches between vaccine containers and refrigerator walls.
- ✓ Do post "Do Not Unplug" signs on refrigerator and near electrical outlet.

### DON'T

- ✗ Don't use dormitory-style refrigerator.
- ✗ Don't use top shelf for vaccine storage.
- ✗ Don't put food or beverages in refrigerator.
- ✗ Don't put vaccines on door shelves or on floor of refrigerator.
- ✗ Don't drink from or remove water bottles.



**U.S. Department of Health and Human Services**  
Centers for Disease Control and Prevention

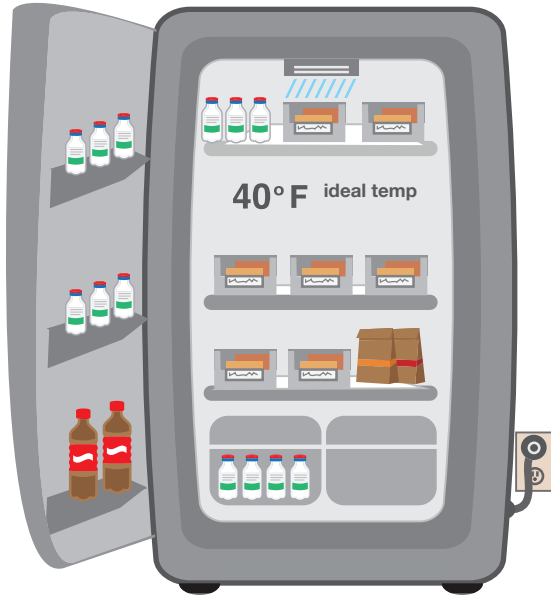
**Distributed by**  
TEXAS Health and Human Services | Texas Department of State Health Services  
Immunization Unit  
Stock No. E11-14481 Rev. 07/2019

CS243541-C Revision February 2018

Visit [www.cdc.gov/vaccines/SandH](http://www.cdc.gov/vaccines/SandH) or contact your state health department for more information.

# Test Your Knowledge

1 Can you find at least 8 things that are wrong with vaccine storage in this refrigerator?



2 When unpacking vaccines, why is it important to put the first-to-expire in the front?

- A. It reduces the risk that an expired vaccine will be given
- B. It saves money by reducing waste
- C. It reduces time spent on returns
- D. All of the above
- E. None of the above—it's really about organization

3 It is okay to drink from the water bottles as long as you replace them. True/False

4 One of the most common reasons that refrigerators are out of temperature range is:

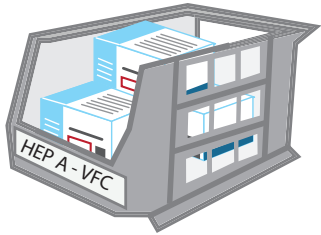
- A. Power outage
- B. The thermometer is broken
- C. Staff doesn't shut the refrigerator door
- D. The refrigerator thermostat is not working properly

5 Refrigerated vaccines should be stored between \_\_\_\_\_° F and \_\_\_\_\_° F, but the ideal temperature is \_\_\_\_\_° F.

1. There are 9 things wrong with this picture. Vaccines are too close to the vent. There is no "Do Not Unplug" sign. There is no thermometer. Some of the vaccines are not in bins. Bins are placed on the top shelf. Food and beverages are in the refrigerator. Crisper bins have not been replaced with water bottles. Vaccine is stored in crisper bins and on door shelves. There are no water bottles in the door racks.
2. D—There are many important reasons to ensure the first-to-expire vaccines are stored in the front!
3. False—Water bottles are intended to help maintain proper temperature. When you replace them, it takes time for them to get to the right temperature, so they are not doing their job.
4. C—Believe it or not, staff not shutting the refrigerator door is one of the most common reasons a refrigerator is out of temperature range!
5. Refrigerated vaccines should be stored between 36° F and 46° F, but the ideal temperature is 40° F.

# Storage Best Practices for Refrigerated Vaccines—Celsius (C)

## 1 Unpack vaccines immediately



1. Place the vaccines in trays or containers for proper air flow.
2. Put vaccines that are first to expire in front.
3. Keep vaccines in original boxes with lids closed to prevent exposure to light.
4. Separate and label vaccines by type and public (VFC) or private.

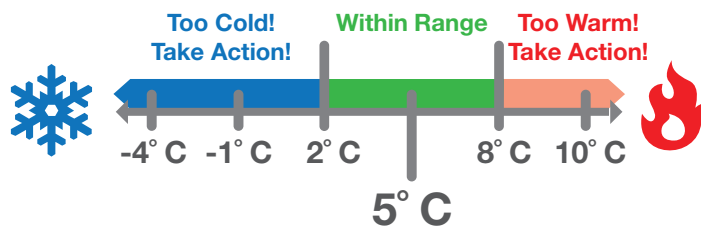
## 2 Store vaccines at ideal temperature: 5° C



**Never freeze refrigerated vaccines!**

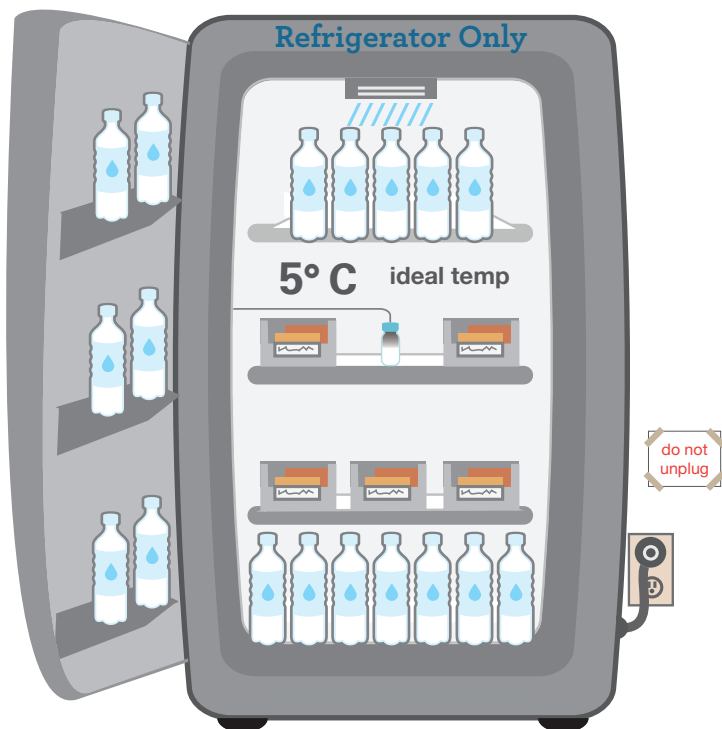
Exception: MMR can be stored in refrigerator or freezer

### Refrigerated Vaccines



**Report out-of-range temperatures immediately!**

## 3 Use vaccine storage best practices



### DO


- ✓ Do make sure the refrigerator door is closed!
- ✓ Do replace crisper bins with water bottles to help maintain consistent temperature.
- ✓ Do label water bottles "Do Not Drink."
- ✓ Do leave 2 to 3 inches between vaccine containers and refrigerator walls.
- ✓ Do post "Do Not Unplug" signs on refrigerator and near electrical outlet.

### DON'T

- ✗ Don't use dormitory-style refrigerator.
- ✗ Don't use top shelf for vaccine storage.
- ✗ Don't put food or beverages in refrigerator.
- ✗ Don't put vaccines on door shelves or on floor of refrigerator.
- ✗ Don't drink from or remove water bottles.



**U.S. Department of Health and Human Services**  
Centers for Disease Control and Prevention

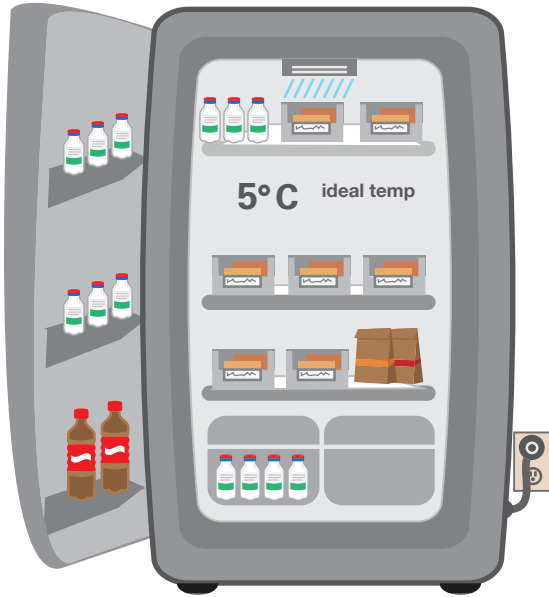
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CS243541-C Revision February 2018

Visit [www.cdc.gov/vaccines/SandH](http://www.cdc.gov/vaccines/SandH) or contact your state health department for more information.

# Test Your Knowledge

1 Can you find at least 8 things that are wrong with vaccine storage in this refrigerator?



2 When unpacking vaccines, why is it important to put the first-to-expire in the front?

- A. It reduces the risk that an expired vaccine will be given
- B. It saves money by reducing waste
- C. It reduces time spent on returns
- D. All of the above
- E. None of the above—it's really about organization

3 It is okay to drink from the water bottles as long as you replace them. True/False

4 One of the most common reasons that refrigerators are out of temperature range is:

- A. Power outage
- B. The thermometer is broken
- C. Staff doesn't shut the refrigerator door
- D. The refrigerator thermostat is not working properly

5 Refrigerated vaccines should be stored between \_\_\_\_\_° C and \_\_\_\_\_° C, but the ideal temperature is \_\_\_\_\_° C.

1. There are 9 things wrong with this picture. Vaccines are too close to the vent. There is no "Do Not Unplug" sign. There is no thermometer. Some of the vaccines are not in bins. Bins are placed on the top shelf. Food and beverages are in the refrigerator. Crisper bins have not been replaced with water bottles. Vaccine is stored in crisper bins and on door shelves. There are no water bottles in the door racks.
2. D—There are many important reasons to ensure the first-to-expire vaccines are stored in the front!
3. False—Water bottles are intended to help maintain proper temperature. When you replace them, it takes time for them to get to the right temperature, so they are not doing their job.
4. C—Believe it or not, staff not shutting the refrigerator door is one of the most common reasons a refrigerator is out of temperature range!
5. Refrigerated vaccines should be stored between 2° C and 8° C, but the ideal temperature is 5° C.