

# WHAT'S IN THE FRIDGE?

## VACCINE STORAGE CHECKLIST

For more information on each of the below numbered items, refer to the guide on page 2.

Adapted from U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (June 2016)

**1. Type of Fridge (circle one):**

**"DORM" STYLE or STAND-ALONE or COMBINATION**

2. \_\_\_\_\_ °F Check temperature of the fridge (35-46 °F)

3.  Check location of vaccine trays within the fridge

**Y / N** Are the trays stored in the middle of the fridge (2-3 inches from walls)?

**Y / N** Are the trays positioned away from freezer and clearly and correctly labeled?

4. **Y / N** Is the clinic storing food, snacks, or drinks in the vaccine fridge?

5.  Check expiration dates and rotate inventory

**Y / N** Are shorter dated vaccines in front with longer dated products in the back?

**Y / N** Are there any expired vaccines to return?

Expired vaccines include: \_\_\_\_\_

\_\_\_\_\_

6. How often are temperatures monitored? \_\_\_\_\_

**Helpful tip:** Refer to the website below for specific thermometer recommendations.

7. **Y / N** Does clinic monitor arriving vaccine shipments?

Vaccines should arrive cold (not frozen or lukewarm)

Vaccines should not be directly on ice packs

8. **Y / N** Are the coils beneath the refrigerator clean, and is the fan clear to ensure proper circulation?

**TIP:** Place water bottles on the top shelf, floor, and in the door racks to control temperature

**TIP:** Add "do not unplug" label on the cord to refrigerator

**Notes:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**For more information** on recommendations for proper vaccine storage and handling, refer to the 2017 AAHA Canine Vaccination Guidelines here:

[https://www.aaha.org/guidelines/canine\\_vaccination\\_guidelines/cdc\\_vaccine\\_storage\\_handling.aspx](https://www.aaha.org/guidelines/canine_vaccination_guidelines/cdc_vaccine_storage_handling.aspx)

# VACCINES STORAGE CHECKLIST GUIDE

Each of the below numbers corresponds with the question or circumstance described on page 1. Use this guide to assist with determining the best course of action for your customers.

## 1. Is the freezer compartment completely separate?

### **CDC makes the following recommendations for vaccine storage units:**

- Use purpose-built units designed to either refrigerate or freeze (can be compact, under-the counter-style or large units).
- If a purpose-built unit is not available, use a stand-alone household unit.
- Do not store any vaccine in a dormitory-style or bar-style combined refrigerator/freezer unit under any circumstances. These units have a single exterior door and an evaporator plate/cooling coil, usually located in an icemaker/freezer compartment. These units have been shown to pose a significant risk of freezing vaccines, even when used for temporary storage. (Note: Not all small storage units are dormitory- or bar-style units).

Refrigerators with freezers in the same compartment can have inconsistent temperatures that may be below 35° F right below the freezer and above 46° F at the bottom.

## 2. Temperature of the fridge

Most companion animal vaccine labels require storage between 35° and 46° F. Lack of adherence to proper storage temperature can result in lack of vaccine effectiveness and increased safety concerns.

Many people believe that it is better to have colder temperatures in the refrigerator to “be on the safe side.” They think about their food and the concerns about it “going bad” if the temperature gets too warm (like a potato salad). For vaccines, this is not true – too warm OR too cold can cause safety and efficacy concerns.

## 3. Location of the vaccine trays within the fridge

- a. To assure stable temperature, always store vaccines in the middle of the refrigerator, not on the door, at the back, or in meat or vegetable bins. If the freezer compartment is not separate, the trays should be positioned away from the freezer.

## 4. Storing items other than vaccines

- a. It is very important that the hospital has a separate refrigerator for the staff to store food, snacks and drinks, as well as frequently used medications. Imagine the number of times the refrigerator might be opened and closed during the day, raising the temperature inside the refrigerator each time. This is for staff protection, vaccine safety, and is also an OSHA regulation

## 5. Monitoring expiration dates and rotating inventory

- a. Inventory management is crucial in maintaining top-quality vaccines. Have you ever reached for a vaccine only to discover it's expired? Without an effective inventory monitoring system, it's easy to see how this can happen.
- b. Check expiration dates/retain packaging
- c. Shorter expiration dates in front; longer behind
- d. Create a system for returning expired vaccines. Have a special place to keep expired product and quickly contact your distribution representative to return product.

## 6. Is there a fridge thermometer in use?

- a. Place a reliable thermometer in the same area where the vaccines are stored. This way you can monitor the temperature to make sure it is consistently in the 35° F to 46° F range. Ideally, the thermometer is checked twice daily (once in the morning and once in the evening) and the log is checked weekly (if a logging thermometer exists in the clinic). CDC recommends the use of a continuous monitoring and recording digital data logger (DDL) but use at least a minimum/maximum thermometer. Also, it is ideal to use a buffered probe (in glycol, glass beads, sand, Teflon) because it will more closely match vaccine temperatures (less influenced by air temp fluctuations)

## 7. Monitoring arriving shipments

- a. Check vaccines when they arrive. They should be cool – not frozen or lukewarm. Importantly, you may not be able to visually see a difference. Ice crystals could form and damage the vaccine without completely freezing solid.
- b. A hospital vaccine log should be designed and placed near the vaccine refrigerator. Proper storage and monitoring of vaccines is critical in ensuring the safety and efficacy of the vaccines and the safety of pets that receive them.

### Vaccine Manager

- a. Designate a person to be in charge of vaccine handling, storing, recording and inventory management. This person should be detailed, rigorous and understand the importance of the job. The Vaccine Manager will want to record information such as:
  - i. Vaccine name
  - ii. Manufacturer
  - iii. Number of doses
  - iv. Date received
  - v. Lot number/expiration date
  - vi. Arrival condition & temperature
- b. Appoint a back-up manager
- c. Have an emergency plan for power outages

## 8. Refrigeration Tips

- a. A Velcro latch on the refrigerator door is a good idea – that way you know the refrigerator door is closed tightly.
- b. Water bottles keep the temperature more consistent by keeping cool when the door is frequently opened and warming slightly when temperatures approach freezing (latent heat). Be sure to clearly mark the bottles so they are not mistaken for drinking water.
- c. Clean pet hair and other debris from the refrigerator coils on the bottom or the back regularly.
- d. Finally, put a DO NOT UNPLUG sign by the refrigerator's electric outlet to help assure the refrigerator is not unplugged for any reason.