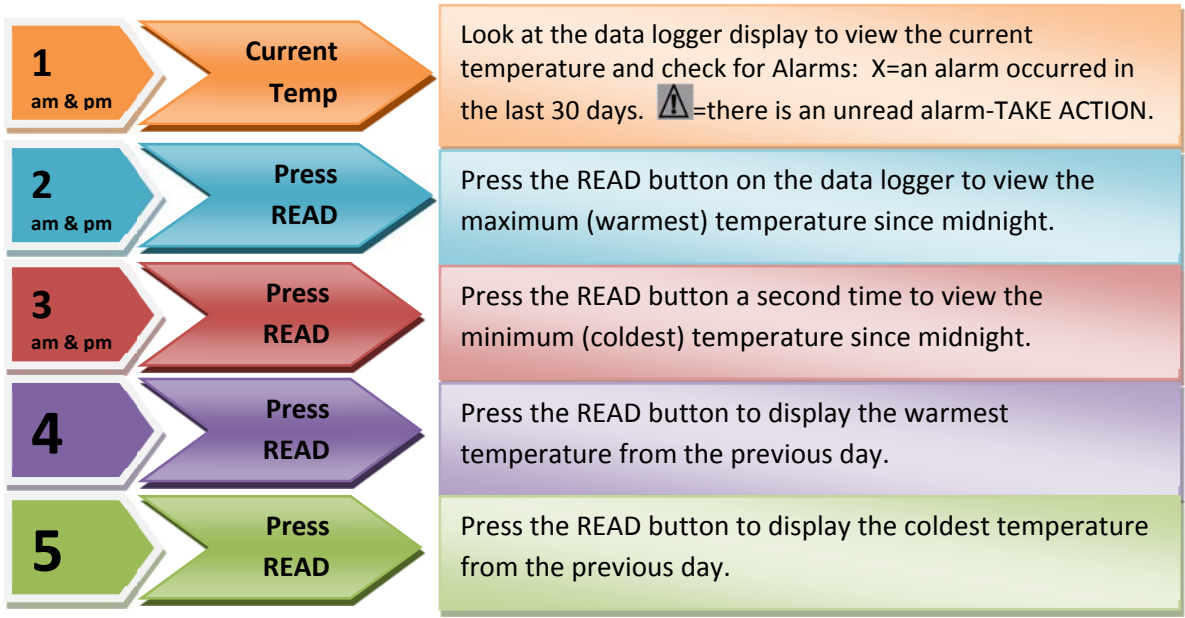


Daily Procedure for Monitoring Temperatures Using Fridge-tag[®]2 Data Loggers

Every Morning (AM)



RESPONDING TO AN ALARM ⚠



STOP - Take Action

Refrigerator Alarm Triggers:

If the current or minimum temperature is colder than **2°C (35.6°F)**
 If the current or maximum temperature is warmer than **8°C (46.4°F)**

Move vaccine to an appropriate storage unit. Quarantine the vaccine and label "Do Not Use". Contact the manufacturers regarding viability. Notify the Division of Immunization at 800-568-1929. Document your actions!

Freezer Alarm Triggers:

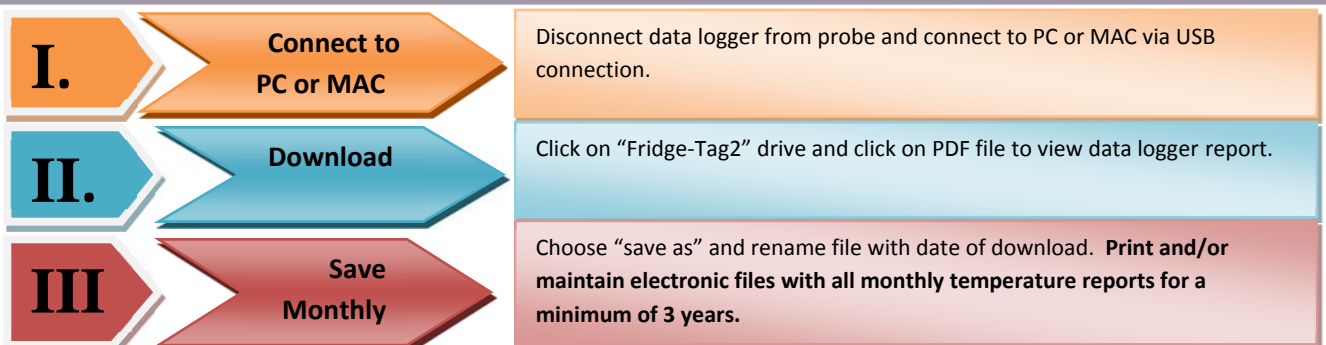
If the current maximum temperature is warmer than **-15°C (5°F)**

Every Afternoon (PM)

Repeat steps 1-3 above in the afternoon or at closing.

By Pressing the READ button in the morning and afternoon, "AM" and "PM" will print under the Events column on the data logger report indicating the minimum and maximum temperature have been properly read each day.

Procedure for Downloading Temperature Report from Fridge-tag[®]2 Data Loggers



Vaccine Temperature Excursion Protocol

Appropriate Vaccine Temperature Ranges:

Refrigerators should maintain temperatures between **2° C and 8° C (36° F and 46° F)**

Freezers should maintain temperatures between **-50° C and -15° C (-58° F and +5° F)**

Ultra-cold freezers should maintain temperatures between **-90° C and -60° C (-130° F and -76° F)**

Refrigerator or freezer thermostats should be set at the factory-set or midpoint temperature, which will decrease the likelihood of temperature excursions.

When to Take Action: If you stock the IPV multi-dose vial. If it is open, you should contact the manufacturer for ANY excursion (even 1 minute.) For all other vaccines, please see below:

Refrigerator:

- Temperatures reach 25+ Celsius (77+ Fahrenheit) ***for any amount of time***
- Temperatures reach 0- Celsius (32- Fahrenheit) ***for any amount of time***
- Temperatures reach >8 to <25 Celsius (>46 to <77 Fahrenheit) for more than **1 hour**
- Temperatures reach >1 to <2 Celsius (>33 to <36 Fahrenheit) for more than **15 minutes**

Freezer:

- Temperatures reach 25+ Celsius (77+ Fahrenheit) ***for any amount of time***
- Temperatures reach -14 to 24+ Celsius (6+ to 76+) for more than **1 hour**

Required Action:

1. Continue to store vaccines correctly. If your storage unit has stopped working, please move vaccines to an alternate storage unit or back-up location until the unit can be repaired/replaced. Keep data loggers with vaccines at all times.
2. Do NOT use vaccines until viability is determined ***by the vaccine manufacturer***. Quarantine and label storage unit or affected vaccines “Do Not Use.”
3. Consult each manufacturer to determine vaccine viability. Before contacting the manufacturers, make sure you have the following information:
 - Inventory of affected vaccines (including lot numbers and expiration dates)
 - Total duration out of range too warm/cold
 - Min/Max temperature for the excursion
 - Copy of data logger report showing excursion information

4. Obtain vaccine viability information in writing from each manufacturer and submit to the order center along with data logger report. Information can be emailed to vvfc@vdh.virginia.gov or faxed to 804-864-8090.

Note: Manufacturers must be contacted with EACH excursion.

Manufacturer Contact Information:

GSK Vaccine Stability Calculator: <https://gskusmedicalaffairs.com/stability-calculator/>

Sanofi Vaccine Stability Calculator: https://www.sanofimedicalinformation.com/s/stability-calculator/?!language=en_US&CN=US

Merck Vaccine Stability Calculator: <https://www.merckmedicalportal.com/s/temperature-stability-calculator>

Pfizer Vaccine Stability Calculator: <https://www.pfizermedicalinformation.com/stability-calculator>

Moderna Temperature Excursion Tool: <https://mrna-access.modernatx.com/tools>

AstraZeneca: (877) 633-4411

Bavarian Nordic: (866) 378-5237

Dynavax Technologies: (844) 375-4728

Emergent BioSolutions: (866) 300-7602

GlaxoSmithKline: (877) 356-8368

MassBiologics: (617) 474-3220

Merck: (800) 672-6372

Pfizer: (800) 438-1985

Sanofi Pasteur: (800) 822-2463

Seqirus: (855) 358-8966

Valneva: (301) 556-4500