

VVFC 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**

Note: Time out of range refers to **cumulative** time out of range per 24-hour period.

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.” Mark all affected vaccines in case they are involved in another excursion--the manufacturer will need to know.
3. Consult each manufacturer to determine vaccine viability. Before contacting the manufacturers, make sure you have the following information:

- Inventory of affected vaccines (they should be marked/labeled in case they are involved in additional excursions as consecutive excursions impact viability)
 - 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

Vaccine Storage and Handling Resources:

<https://www.vdh.virginia.gov/immunization/vvfc/vfcsh/>

<https://www.immunize.org/clinical/topic/storage-handling/>

<https://www.cdc.gov/vaccines/hcp/storage-handling/resources.html>

Online Vaccine Storage and Handling Training Module (from You Call the Shots:)

<https://www2.cdc.gov/nip/isd/ycts/mod1/courses/sh/ce.asp>

Note: *It is a VFC requirement to have a written emergency plan (the template can be found here: <https://www.vdh.virginia.gov/content/uploads/sites/11/2016/08/EmerRespPlan.pdf>.) It is advised to not move vaccines the moment a power outage occurs but wait it out unless you know the power will be out for more than 12 hours. If you do move vaccines, make sure data loggers are with the vaccines at all times and you have followed appropriate vaccine transport guidance.*