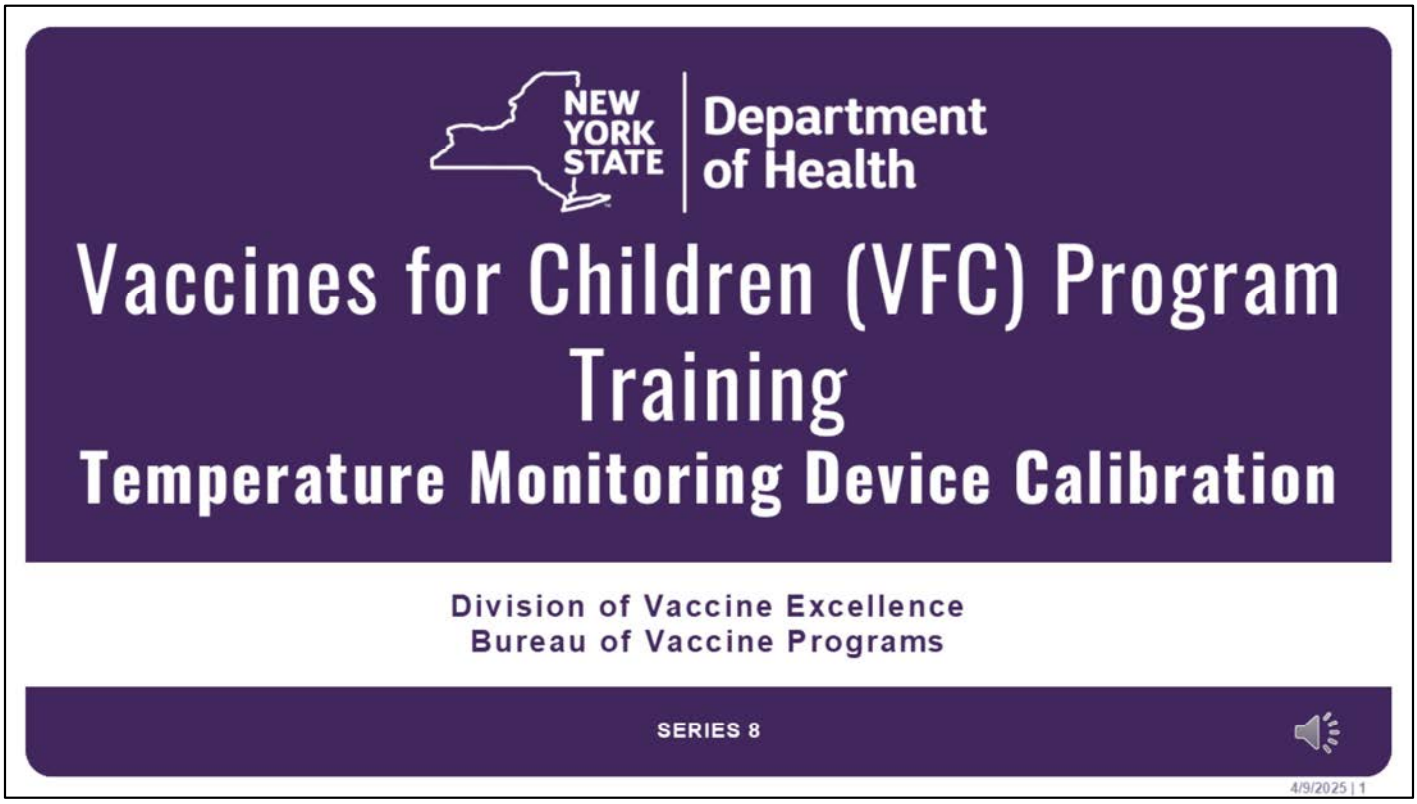
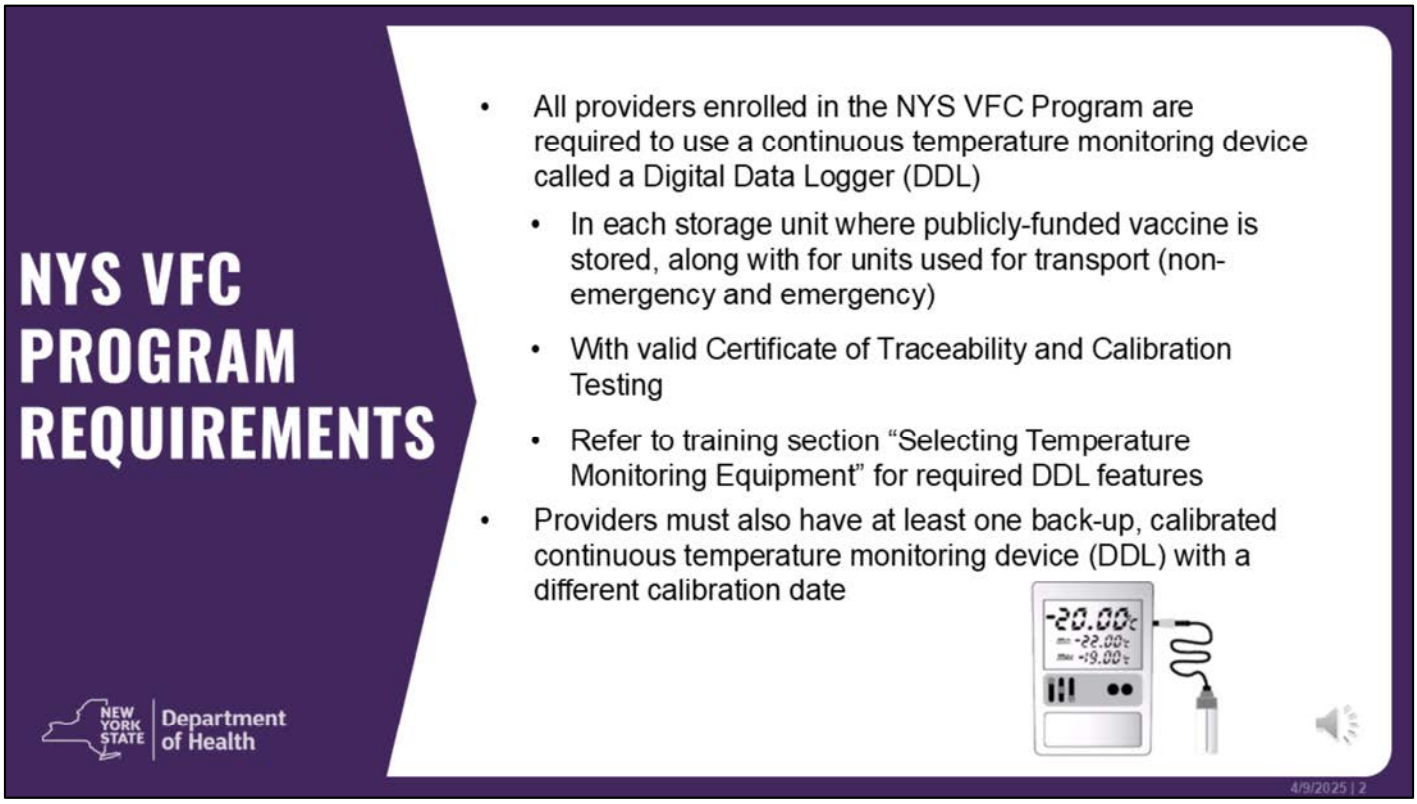


Hello and welcome. This training is intended to provide guidance to New York State Vaccines for Children (VFC) providers on Temperature Monitoring Device Calibration.



The NYS VFC Program requires all VFC providers to use a calibrated, continuous temperature monitoring device, called a Digital Data Logger (or DDL) to monitor temperatures in each unit that stores publicly-funded vaccine, including units used for transport (non-emergency and emergency).

Each device must have a current Certificate of Traceability and Calibration Testing.
Please refer to Training #7, "Selecting Temperature Monitoring Equipment" for required DDL features.

Providers are also required to have at least one-back up, calibrated, continuous temperature monitoring device (or DDL) with a current certificate of calibration. The back up device should be used in case of equipment failure or when calibration testing is due for the primary device(s). Your back-up device should have a different calibration date than your primary device.

CALIBRATION DEFINED

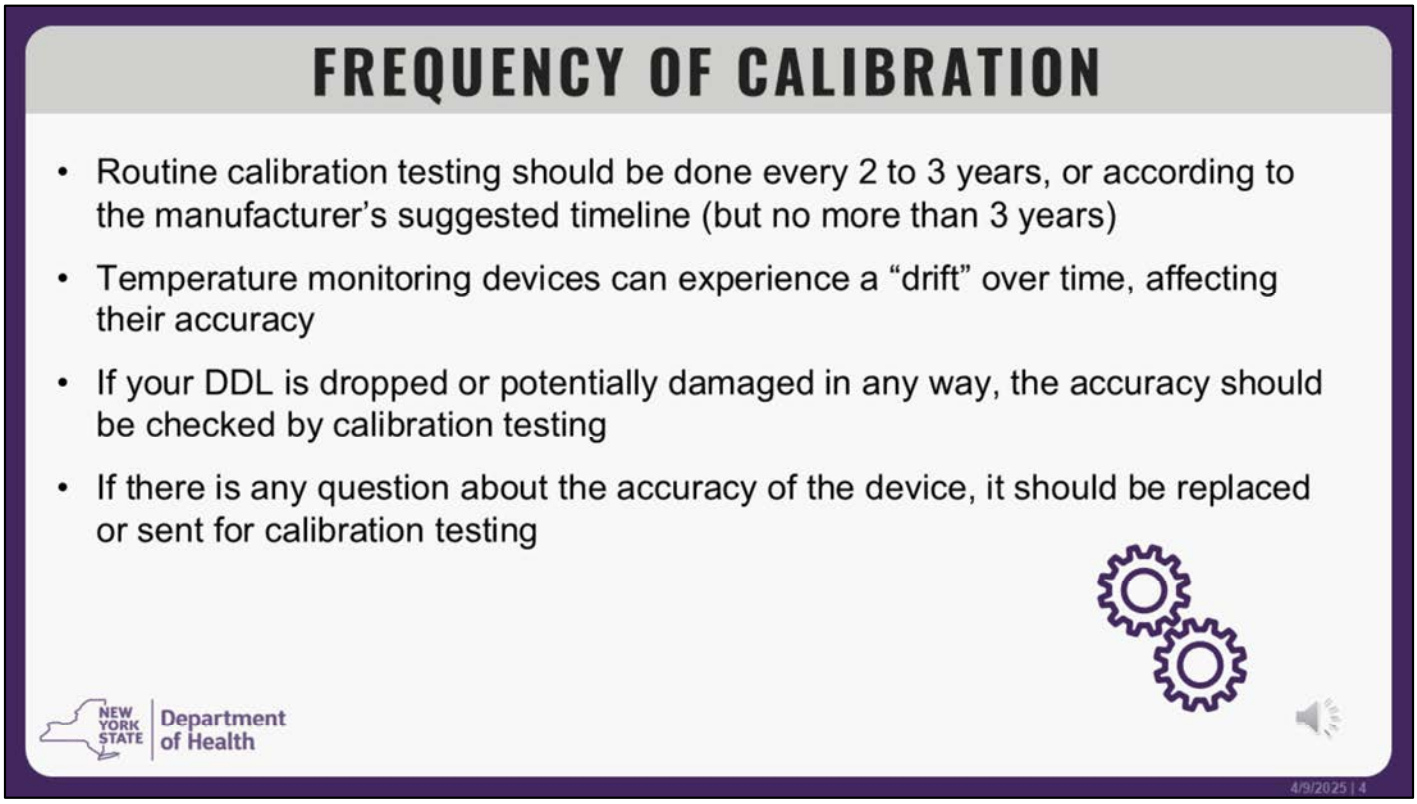
- In this case, calibration is the professional measurement of the accuracy of a temperature monitoring device's readings against nationally accepted standards.*
- Accuracy for DDLs must be within +/- 1° F (+/- 0.5° C)

*CDC Vaccine Storage and Handling Toolkit

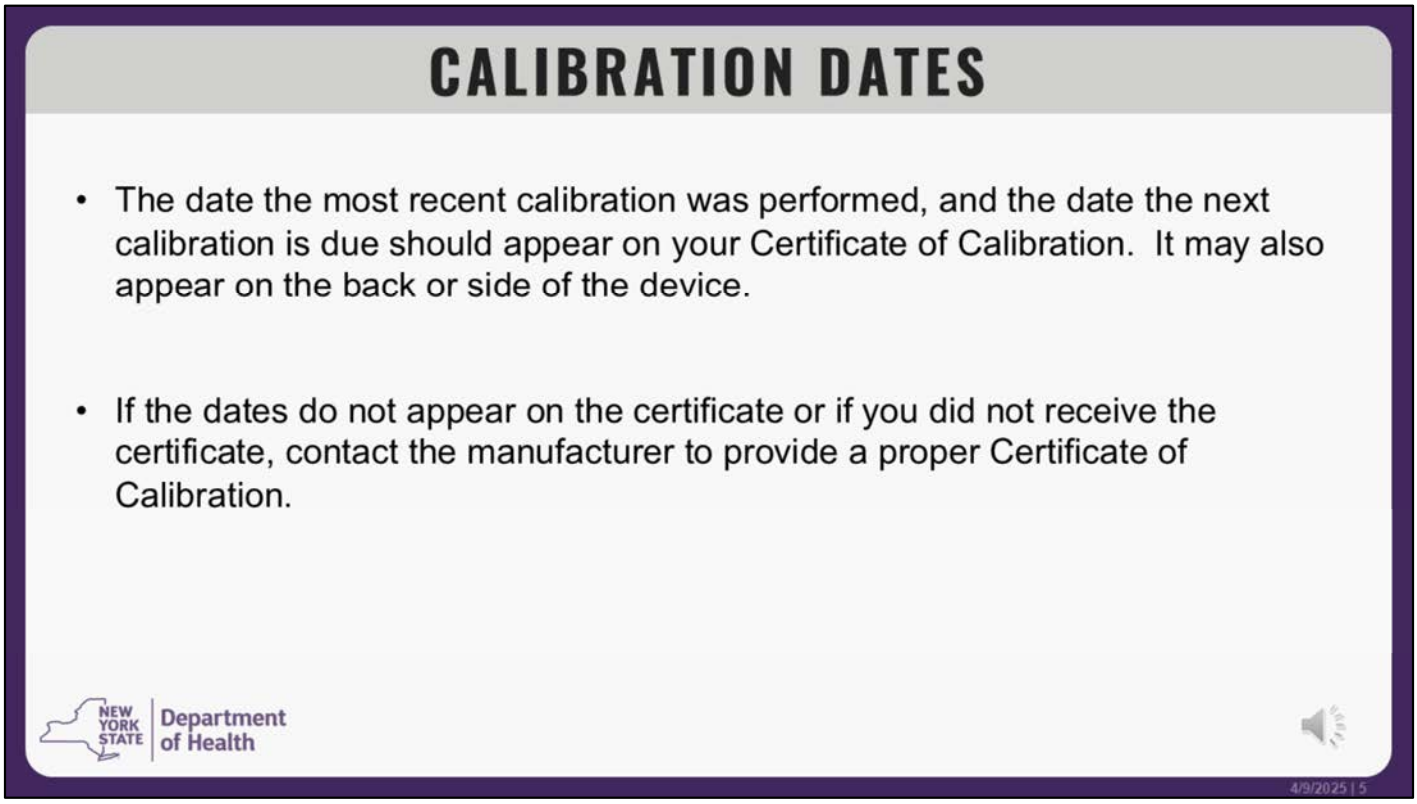
NEW YORK STATE | Department of Health

4/9/2025 | 3

Per CDC's Storage and Handling Toolkit, linked here and on the resources document provided with this training, Calibration is defined as the professional measurement of a temperature monitoring device's readings against nationally accepted standards.
Accuracy for digital data loggers must be within + 1° F (+ 0.5° C)



Routine calibration testing should be done every 2 to 3 years, or according to the manufacturer's suggested timeline . The calibration certificate should indicate the date the device was calibrated and the date the next calibration is due. Data loggers must have calibration dates no more than 3 years from the date last calibrated.
Temperature monitoring devices can experience a "drift" over time, affecting their accuracy. This testing ensures the accuracy of the device continues to conform to nationally accepted standards.
Mishandling a DDL can affect its accuracy. If your DDL is dropped or potentially damaged in any way, its accuracy should be checked against another calibrated DDL.
If there is any question about the accuracy of the device, it should be replaced or sent for calibration testing.



The date the most recent calibration was performed, and the date the next calibration is due should appear on your calibration certificate. It may also appear on the back or side of the device.

If the dates do not appear on the certificate or if you did not receive the certificate, contact the manufacturer to provide a proper certificate of calibration.

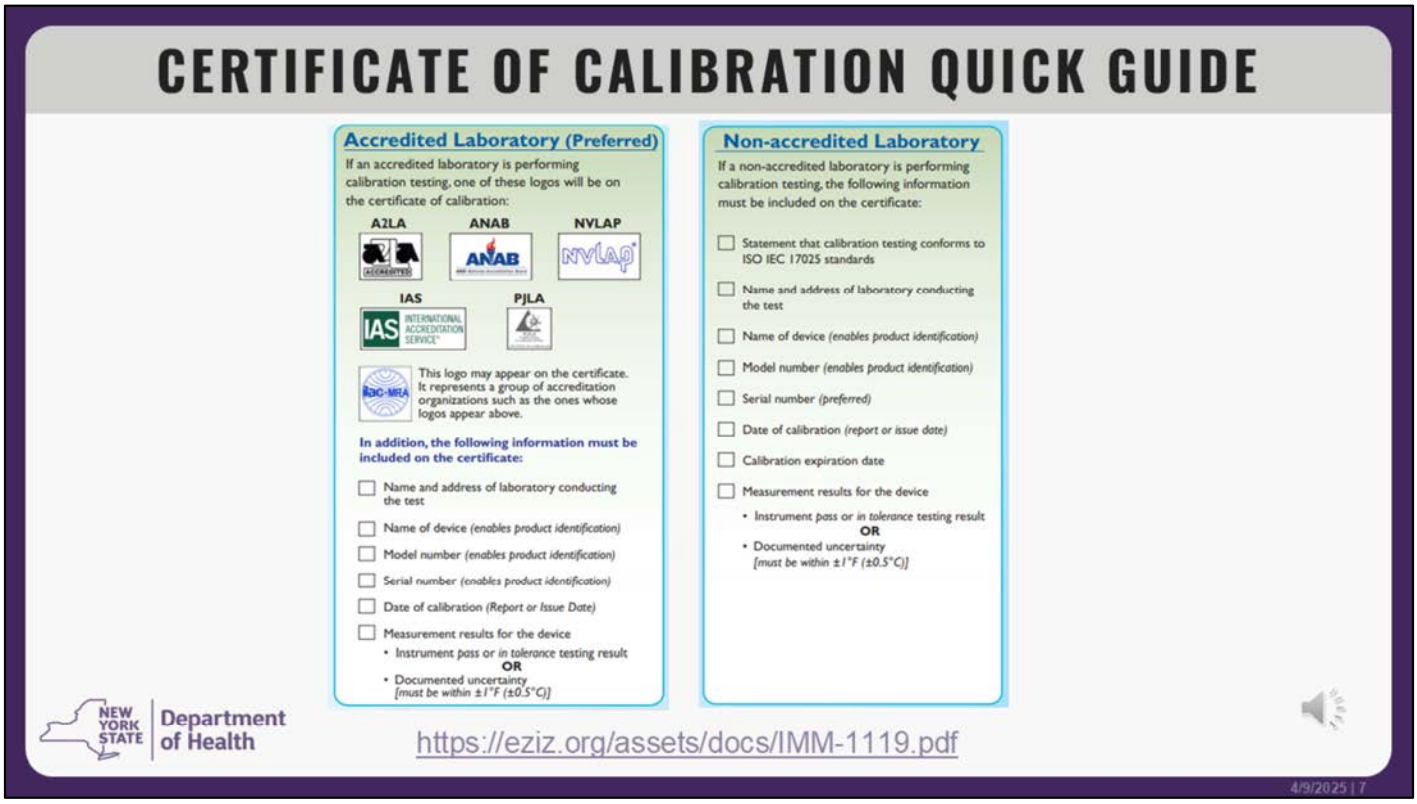
There are two types of laboratories that can perform acceptable calibration under NYS VFC requirements.

The first is a laboratory with accreditation from an International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) Signatory body. Calibration testing and traceability that is performed by a laboratory with accreditation from an ILAC MRA signatory body assures the user that testing performed meets the appropriate standard.

It is also acceptable for a non-accredited laboratory to perform the calibration as long as they state that they adhere to ISO 17025, which is the International Organization for Standardization's, General requirements for the competence of testing and calibration laboratories.

Keep in mind that even if a vendor or laboratory claims to "certify" temperature monitoring devices, this does not necessarily mean their calibration process meets ISO 17025 standards or that they are appropriately accredited.

If the vendor or manufacturer does not handle calibration, you must find an acceptable calibration laboratory. The International Laboratory Accreditation Cooperation or ILAC has a web resource you can use to look up acceptable calibration laboratories. The link can be found in the resources document provided with these trainings.



Here are some “cheat sheets”, to help determine if a calibration certificate is acceptable. Accredited laboratories will have one of the logos seen on the left, in addition to the items listed below. Refer to the lists of items on the right to determine if the calibration from a non-accredited laboratory is acceptable.

SAMPLE CERTIFICATE OF CALIBRATION

ABC

Calibration Lab

123 Calibration St, City, State 12345

Certificate of Calibration

SAMPLE CERTIFICATE

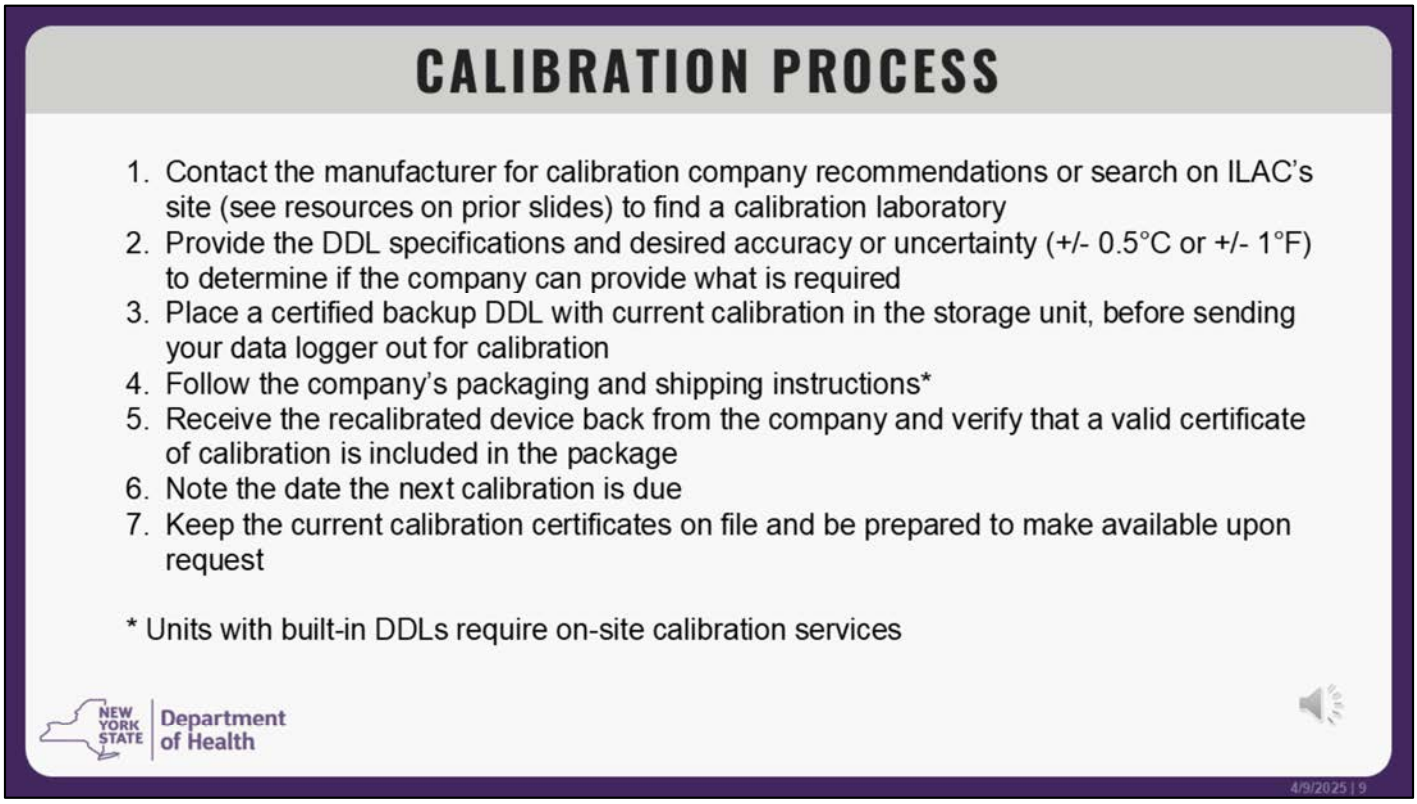
Here is a sample certificate from an accredited laboratory.

Note the logos and other listed information.

NEW YORK STATE | Department of Health

4/9/2025 | 8

This is a sample calibration certificate from an accredited laboratory. Note the logos and other listed information.



The DDL manufacturer should be able to provide information on recommendations for recalibration of your data logger. They will need to know the accuracy or uncertainty requirements (within + 1° F (+ 0.5° C))
Before sending your data logger out for calibration, you must place a certified calibrated back-up data logger in your storage unit, as the unit must be constantly monitored.
When the data logger is returned, look for the calibration certificate in the box. If not included, immediately call the company and request it to be emailed or faxed.
Calibration certificates must be made available upon request from the NYS VFC Program
Units with built in data loggers require on site calibration services.

CALIBRATION OR NEW PURCHASE?

1. Purchasing a new DDL is sometimes less expensive than having an existing device recalibrated. Weigh your options.

2. Some DDLs are not built to be recalibrated and are designed to be discarded when the calibration expires (the NYS-supplied Fridge-Tag® 2L is one example).

NEW YORK STATE | Department of Health

4/9/2025 | 10

Inquire about the cost of calibration versus the cost of purchasing a new data logger. Purchasing new is often less expensive than having an existing device recalibrated.
Some data loggers are not built to be recalibrated. Please keep in mind that the NYS supplied Fridge-Tag® 2L DDLs may not be recalibrated.

Thank you for your participation in this training on Temperature Monitoring Device Calibration. As always, any questions can be sent to nyvfc@health.ny.gov.