This guidance lists the minimum requirements for all providers using electronic temperature monitoring systems. The Washington State Department of Health (DOH) is responsible for monitoring provider vaccine storage and handling practices can set additional requirements or standards for electronic vaccine storage temperature monitoring they think are needed to ensure vaccines are viable when they are used.

Electronic monitoring systems generally consist of a network of thermometers connected to a central computer. The computer stores information from each of the thermometers so a provider may view temperatures of multiple storage units at once. Depending on the system, these temperatures can be viewed in the practice or monitored remotely by an alarm company or staff. These systems sound an alarm or send a notification if storage units have a temperature excursion. These systems help alert staff to after-hours emergencies. These systems are most commonly used in large settings such as hospitals when monitoring a large number of thermometers can be burdensome.

Electronic monitoring systems are different from data loggers. Data loggers are single unit thermometers which record temperatures over time. This temperature data is saved in the data logger’s memory, which may be downloaded and viewed on a computer. For our guidelines on data loggers, please visit: http://www.doh.wa.gov/Portals/1/Documents/Pubs/348-452-DataLoggerGuidelines.pdf

**Minimum requirements for vaccine storage unit electronic temperature monitoring:**

- All electronic temperature monitoring systems MUST BE tested prior to implementation.
- Vaccine storage unit temperature measurements must be manually recorded on the DOH supplied temperature-monitoring log at least twice a day. Twice daily temperature monitoring and recording is required regardless of the thermometer type. See the Vaccine Storage Temperature Monitoring Guidelines for more details:
- Providers must be able to view temperatures on-site via a computer or a digital display.
- Providers must review their temperature logs weekly to ensure proper temperature recording.
- Providers will send temperature logs to DOH with the provider’s monthly vaccine accountability reports.
- The electronic temperature monitoring system must be tested a minimum of twice per year to ensure it is functioning properly. Keep records of the testing in the practice’s vaccine management plans.
- The electronic temperature monitoring system must be maintained and recalibrated per the manufacturer’s instructions or every two years, whichever is shorter.
• The provider must have a written plan for receiving alarms and notifications, including the identification of the person(s) or positions responsible for responding to the alarm and managing the temperature excursion and follow-up.

• The written plan will be reviewed by DOH prior to implementation. The written plan will also be reviewed during site visits, and must be kept on file in the practice’s vaccine management plans.

Requirements for systems with automatic notification:

• Providers must program the system to call or page someone “on-call” who can respond to the alarm within 20-60 minutes, 24 hours per day, 7 days per week.

• The system must generate a call or page that connects in person to whoever is monitoring the system. Connecting with voice mail, voice messaging, or texting is NOT acceptable.

• Clinics staffed 24 hours per day, 7 days per week will have a designated responder and at least one back-up who will respond to an audio alarm, page, phone call or other notification. Designated individuals must respond to the alarm at the storage site within 20 minutes.

Requirements for systems monitored by alarm companies:

• Alarm companies must agree to these minimum alarm response system requirements and additional requirements as determined by DOH.

• Alarm companies agree to notify providers if:
  o The storage temperature is out of range.
  o The storage unit malfunctions.
  o The alarm goes off repeatedly even though temperatures seem stable.

• Alarm companies must give providers access to real time temperatures, either via a digital display or by computer access.

• The alarm system must generate a call that connects in person to whoever is monitoring the system. Connecting with voicemail, voice messaging or texting is NOT acceptable.

• The alarm company must call or page the provider per a previously agreed upon call tree of phone numbers or pagers.

• The alarm company must continue to call or page the back-up call numbers until a person is contacted. Leaving a voice mail or message is not acceptable.

• Test the phone system to ensure the connection works appropriately.

• Keep the phone contact list updated and in place at all times.