Hello and welcome.

This training is intended to provide guidance to NYS Vaccines for Children (VFC) providers on developing Vaccine Management Plans.
NYS VFC Program Requirements

- Routine Vaccine Storage and Handling Plan
  - Includes routine tasks and standard operating procedures (SOPs)
- Emergency Vaccine Retrieval and Storage Plan
  - Includes information and instructions in the event of an emergency
    - e.g. equipment failures, power outages or natural disasters
  - Activate plan if storage unit not back into range within 2 hours or power outage sustained for 2 hours or more
- Plans should be reviewed and updated at least annually
- Ensure that all staff are aware of the plan and know the designated contacts and procedures to follow in an emergency
- An Emergency Plan template is available

Each VFC provider is required to have routine and emergency vaccine storage and handling plans. The routine vaccine storage and handling plan should cover routine tasks associated with the storage and handling of vaccine.

The emergency Vaccine Storage and Handling Plan should include information and instructions in the event of an emergency (e.g. equipment failures, power outages and natural disasters). Vaccine coordinators are responsible for activating their emergency plan if the vaccine storage unit is not back into range within two hours or if power is not back in service within two hours.

Vaccine management plans should be reviewed and updated annually.

Ensure that all facility, custodial and security staff are aware of the location of the emergency plan and know the designated emergency staff contacts and procedures to follow if there are problems with vaccine storage equipment.

The NYS VFC program provides an emergency plan template that can be used to indicate emergency plan information for your practice. Visit the resources slide at the end of this training to access this template.
A routine vaccine storage and handling plan is comprised of the following sections:

- standard operating procedures,
- contact information,
- staff roles, responsibilities and training and
- vaccine and diluent storage requirements and forms.
Elements of Routine Vaccine Storage and Handling Plan

<table>
<thead>
<tr>
<th>Standard Operating Procedures (SOPs)</th>
<th>Contact information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordering &amp; accepting vaccine deliveries</td>
<td>Provider of Record, Vaccine coordinator &amp; Back-up coordinator</td>
</tr>
<tr>
<td>Unpacking, handling, &amp; storing vaccine</td>
<td>LHD immunization programs</td>
</tr>
<tr>
<td>Monitoring storage unit temperatures</td>
<td>NYSDOH VFC program</td>
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<tr>
<td>Maintaining storage units</td>
<td>Vaccine manufacturers</td>
</tr>
<tr>
<td>Addressing storage and handling problems</td>
<td>Storage unit maintenance/repair</td>
</tr>
<tr>
<td>Handling vaccines prior to administration</td>
<td>Temperature monitoring devices</td>
</tr>
<tr>
<td>Disposing of vaccine &amp; supplies</td>
<td>Security and alarm companies</td>
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</table>

The Standard Operating Procedures should give instructions on various tasks related to the storage and handling of vaccine including:

- ordering vaccine; accepting vaccine deliveries;
- unpacking, handling and storing vaccine;
- monitoring storage unit temperatures;
- storage unit maintenance;
- addressing storage and handling problems;
- handling vaccines prior to administration AND
- disposing of vaccines and supplies properly.

The routine storage and handling plan should also include current contact information for key staff and partners, including names, titles, phone numbers and email addresses for the following persons:

- The Provider of Record, the Vaccine Coordinator and Back-up Coordinator,
- the Local Health Department Immunization Program,
- NYSDOH VFC Program staff,
- Vaccine Manufacturers,
- Vaccine Storage Unit Maintenance and Repair Companies, and
- Temperature Monitoring Device Manufacturers which includes information on device recalibration, technical support, etc.

If applicable, the routine plan should also include contact information for vaccine storage unit alarm companies and security companies.
### Elements of Routine Vaccine Storage and Handling Plan

<table>
<thead>
<tr>
<th><strong>Staff Roles and Policies</strong></th>
<th><strong>Vaccine Storage Requirements</strong></th>
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</thead>
<tbody>
<tr>
<td>• Roles and responsibilities for vaccine coordinator and back-up coordinator</td>
<td>• Storage requirements for all vaccine/diluent types</td>
</tr>
<tr>
<td>• Staff education and training policies</td>
<td>• Package inserts <a href="http://www.immunize.org/packageinserts/">http://www.immunize.org/packageinserts/</a></td>
</tr>
<tr>
<td>• Listing of staff names, trainings and training dates</td>
<td>• Samples of forms used in facility</td>
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</table>

A routine vaccine storage and handling plan should include descriptions of the roles and responsibilities for the vaccine coordinator and back-up coordinator and the practice’s staff education and training policies. This includes a listing of staff who handle or receive vaccine and the dates and titles of the trainings they have completed. Required trainings are listed in Training #2.

The routine plan should also include storage requirements for each type of vaccine and diluent in your practice’s inventory. Package inserts can be found on the Immunization Action Coalition’s page via the link on this slide. The routine plan should also include updated samples of specific forms used in your facility (e.g., screening forms, temperature logs, stock records).
Routine Vaccine Storage and Handling Plan Worksheets and Tools

- Centers for Disease Control and Prevention (CDC) Vaccine Storage and Handling Toolkit, page 58
  https://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/storage-handling-toolkit.pdf
- California Department of Health, Storage and Handling Job Aids
  http://eziz.org/resources/storage-handling-job-aids/

The Centers for Disease Control and Prevention or CDC provides many worksheets and resources that can be used to develop your office’s individualized plans. Follow the first link on this slide to be directed to the CDC’s Storage and Handling Toolkit. This information begins on page 58 of the toolkit.

For additional information and examples of a routine storage and handling plan, visit the eLearning and resource website for California’s VFC program at the second link on this slide.
NYS VFC providers are required to have an emergency plan that gives guidance on what to do with vaccines in the event of an emergency. The emergency plan should be updated at least annually and should include the following sections:

- Standard Operating Procedures,
- emergency contact information,
- staff responsibilities and
- a section on transport supplies, equipment and procedures.
# Emergency Storage and Handling Plan

<table>
<thead>
<tr>
<th>Standard Operating Procedures &amp; Instructions</th>
<th>Emergency Contact Information</th>
<th>Staff Responsibilities</th>
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<tbody>
<tr>
<td>- Protocols for monitoring temperatures during power outages</td>
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<tr>
<td>- Vaccine transport Instructions including:</td>
<td></td>
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<tr>
<td>- Location of transport containers, materials</td>
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<tr>
<td>- How to pack vaccines</td>
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<tr>
<td>- Vaccine transport vehicle info (loading, routes, timing)</td>
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<tr>
<td>- After-hour access to facility, floor diagram, key locations</td>
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<tr>
<td>- Access to alternate facility</td>
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<tr>
<td>- Generator operating instructions, fuel location</td>
<td></td>
<td></td>
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<tr>
<td>- Staff contact list (in order of contact preference)</td>
<td></td>
<td></td>
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<tr>
<td>- Driver contacts</td>
<td></td>
<td></td>
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<tr>
<td>- Refrigeration company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Facility security/alarm company #s</td>
<td></td>
<td></td>
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<tr>
<td>- Equipment technical support</td>
<td></td>
<td></td>
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<tr>
<td>- Alternate storage facility contact information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Storage unit information (type, brand name, model &amp; serial #)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Monitor storage equipment &amp; systems</td>
<td></td>
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<tr>
<td>- Generator fuel for at least 72 hours</td>
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<td></td>
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<tr>
<td>- Alert systems are preferable for facilities with large inventories</td>
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<td></td>
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<tr>
<td>- Track inclement weather</td>
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<td></td>
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<tr>
<td>- Maintain notification system(s)</td>
<td></td>
<td></td>
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<tr>
<td>- Post emergency contact information</td>
<td></td>
<td></td>
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<tr>
<td>- Correct vaccine handling</td>
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</tbody>
</table>

The following should be included in standard operating procedures and instructions:
- protocols for monitoring temperatures during power outages,
- detailed instructions for vaccine transport such as the location of transport containers and packing materials,
- how to pack vaccines for transport and information on the vehicle that will be used for transport (including instructions on loading vaccine, predetermined routes and estimated travel timing).

The protocols in your emergency plan should also include details on after-hour access to your facility, including a floor diagram and the location of keys. It may be helpful to also include information on the location of flashlights and batteries in the event of a power outage. Information on how to access the alternate facility should be a part of the emergency plan including hours of operation and required access that may be needed. The emergency plan should include operating instructions for any generators and the location of extra generator fuel.

Emergency Contact Information should be included in your emergency plan and updated on a regular basis.
This includes:
- a staff contact list (is in order of contact preference),
- information on driver contacts,
- refrigeration company contact information,
- security/alarm company information,
- equipment technical support (such as how to operate a temperature monitoring device),
- contact information for the alternate storage facility and
- information on each storage unit type including the brand name, model # and serial #.

Staff responsibilities during emergencies should also be included in the plan.

Vaccine coordinators and their back-ups are responsible for closely monitoring storage
equipment and systems in the event of an emergency. If your facility has a back-up generator, ensure that sufficient fuel is on hand to run generator continuously for at least 72 hours. The installation of a continuous-monitoring temperature alarm/notification system is recommended. Vaccine coordinators are responsible for maintaining these systems including maintaining the contact list for the system and responding to any notifications.

Vaccine coordinators should also have procedures in place to track inclement weather conditions, and maintain notification systems. They're also responsible for posting emergency contact information on circuit breaker(s) or electrical panels and ensuring appropriate vaccine handling during a disaster or power outage.
Testing your Emergency Plan

- Emergency plan testing should be done at least biannually
  - Use as an exercise in staff training
- Phone tree contact info should be updated quarterly
  - Test phone tree during emergency plan testing

It is recommended that you test your emergency plan at least biannually or once every other year. Consider including the test as an exercise in staff training.

Contact information that is included in your practice's emergency phone tree should be updated quarterly and tested as part of the emergency plan testing.
Activating your emergency plan

1. Activate if power has not returned within 2 hours or storage unit has not gone back into range within 2 hours
2. Suspend vaccination activities prior to emergency onset, if possible
3. Notify staff at alternate storage facility
4. Conduct inventory of vaccines and record temperatures and actions taken
5. Follow proper transport protocols (See training #17, Vaccine Transport)

Vaccine coordinators should activate the emergency plan whenever power has been lost and has not returned within 2 hours or whenever a vaccine storage unit has not gone back into range within 2 hours.

When activating your emergency plan because of an anticipated emergency, if at all possible suspend vaccination activities before the onset of emergency conditions. This will allow sufficient time for packing and transporting the vaccines. In the event that there is no prior warning and an emergency event is occurring or has already occurred, follow these procedures only if safety permits.

Notify the staff at the alternate vaccine storage facility before moving your vaccines to ensure that their back-up generator is working and to confirm transportation arrangements.

Before transporting the vaccines, conduct an vaccine inventory, record temperatures, and document any actions taken. Also note if there were any water bottles in affected storage unit refrigerators or freezers at time of event.

Follow appropriate transport protocols as outlined in your emergency plan. Vaccine transport is covered in more detail in training #17.
Key Messages: Vaccine Management Plans

- Update vaccine management plans annually.
- Keep plans near storage units where staff can find them.
- Ensure that maintenance and custodial staff are aware of emergency procedures.
- Vaccine coordinators and back-ups are responsible for activation of emergency plan in the event that
  - storage unit is not back into acceptable range within 2 hours or
  - a power outage exceeds 2 hours.

The key messages for this training module are as follows.

Vaccine management plans should be updated at least annually. There are a number of tools and resources available for you to use to prepare your vaccine management plans. The plans should be as detailed and easy to understand as possible and include all of the information outlined in this training. Keep vaccine management plans near vaccine storage units or in a central location where staff can find them.
Make sure that custodial and maintenance staff are aware of the emergency plan or at least know who to call if there is a problem. Post contact phone numbers for the primary and back-up coordinator near the units.
Vaccine coordinators and their back-ups are responsible for emergency plan activation in the event a storage unit has not gone back into range within 2 hours or a power outage exceeds 2 hours.
## Resources

**NYS Vaccines for Children (VFC) Program**  
Emergency Vaccine Storage and Handling Plan Template  

**Centers for Disease Control and Prevention (CDC)**  
Vaccine Storage and Handling Toolkit  
[http://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/storage-handling-toolkit.pdf](http://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/storage-handling-toolkit.pdf)

**Immunization Action Coalition (IAC)**  
Emergency Response Worksheet  

**American Academy of Pediatrics (AAP)**  
Disaster Planning  

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Here is a listing of available resources.
There are a number of additional trainings available.

The next training in this series is #5, The Vaccine Cold Chain.