

Plan must be completed on initial set up, reviewed annually or updated as staff changes occur.

Date (yyyy-Mon-dd)	<input type="checkbox"/> Completed <input type="checkbox"/> Reviewed <input type="checkbox"/> Updated
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Facility and Vaccine Storage Information

Site Name	Alberta Vaccine Inventory (AVI) PIN Number <i>(generated by site contact)</i>	
Site Address		
AHS Zone <input type="checkbox"/> South <input type="checkbox"/> Calgary <input type="checkbox"/> Central <input type="checkbox"/> Edmonton <input type="checkbox"/> North		
Facility Type <input type="checkbox"/> Public Health <input type="checkbox"/> Acute Care Outpatient Clinics and Emergency Departments <input type="checkbox"/> Acute Care Inpatient Pharmacy <input type="checkbox"/> LTC <input type="checkbox"/> Other <i>(describe)</i>		
Site Vaccine Controller Name		Phone <i>(daytime)</i>
Phone <i>(after hours)</i>	Fax	Email
Backup Vaccine Controller Name		Phone <i>(daytime)</i>
Phone <i>(after hours)</i>	Fax	Email
Other Important Contacts <i>(if more than 5, attach additional sheet)</i>		
Name		Phone <i>(daytime)</i>
Fax	Email	
Name		Phone <i>(daytime)</i>
Fax	Email	
Name		Phone <i>(daytime)</i>
Fax	Email	
Name		Phone <i>(daytime)</i>
Fax	Email	
Name		Phone <i>(daytime)</i>
Fax	Email	

Record Manufacturer and Model Number for each Refrigerator at your facility				
	Manufacturer	Model Number	Purchase Date (yyyy-Mon-dd)	
1				
2				
3				
4				
5				
6				
7				
Service/Repair Provider				
Name	Phone	After Hours Contact		
Record Manufacturer and Model Number for each Freezer at your facility				
	Manufacturer	Model Number	Purchase Date (yyyy-Mon-dd)	
1				
2				
3				
4				
5				
6				
7				
Service/Repair Provider				
Name	Phone	After Hours Contact		
Record Manufacturer and Model Number for each Thermometer/Temperature Monitor at your facility.				
	Manufacturer	Model Number	Location of Monitor	Purchase Date (yyyy-Mon-dd)
1				
2				
3				
4				
5				
6				
7				

Facility Power Arrangements				
Facility Maintenance Contact (<i>daytime</i>)			Facility Maintenance Contact (<i>after hours</i>)	
Electricity Service Provider (<i>may not be the same as retailer/billing company</i>)			24-Hour Outage Contact Phone	
Circuit Breaker Location		Circuit Breaker Access Instructions (<i>if applicable</i>)		
Facility Power Type (<i>select one</i>)				
<input type="checkbox"/> Large-scale facility with continuous standby backup power				
<input type="checkbox"/> Facility with backup power arrangements for vaccine supply (must complete backup power supply field)				
<input type="checkbox"/> No backup power (<i>high volume sites must have a written alternate facility agreement kept with this plan</i>)				
Backup Power Supply (not required for large scale facilities or facilities without backup power)				
Check all that apply <input type="checkbox"/> Generator <input type="checkbox"/> Other (<i>describe</i>)				
Record Generator/Backup Power Supply at Facility				
	Manufacturer	Model Number	Location of Monitor	Purchase Date (<i>yyyy-Mon-dd</i>)
1				
2				
3				
4				
5				
Service/Repair Provider				
Name		Phone		After Hours Contact
Expected duration of backup power (<i>hours</i>)				
Is backup power on an automatic switch? <input type="checkbox"/> Yes <input type="checkbox"/> No - procedures to switch to backup power				
Alternate Facility Arrangements (must be completed for all facilities)				
Alternate Facility Name/Address				
Facility Contact (<i>daytime</i>)			Facility Contact (<i>after hours</i>)	
Access Instructions				
Vaccine Packing and Transporting (must be completed for all facilities)				
Location(s) of packing and transporting supplies				
Transport Method				
<input type="checkbox"/> Courier (<i>Name and contact number</i>) _____				
<input type="checkbox"/> Private Vehicle <input type="checkbox"/> Other (<i>describe</i>) _____				

Equipment Set-Up, Maintenance & Training Checklist
Power Supply

- Vaccine fridge is the only appliance plugged into wall outlet
(if plugged into an extension cord, fridge is the only appliance plugged into an extension cord)
- Unused receptacles are protected by a safety-lock plug or outlet cover unless receptacle is not accessible
(for example behind a fridge)
- "Do Not Unplug" sign is posted above wall outlet
- Correct circuit breaker switch/fuse is labelled with "Vaccine Fridge"

Power Supply Maintenance

- Backup power tested annually Date of last backup power test _____
- Backup power maintained annually Date of last maintenance service _____

Refrigerator Location and Set-up

- Room is well-ventilated
- Refrigerator is not in direct sunlight
- Refrigerator is not located close to a heat source
- There is a minimum of 10 cm clearance *(or as recommended by manufacturer)* between back of refrigerator and wall
- Motor compartment and vents are not blocked by walls or other equipment
- Refrigerator is level
- Refrigerator bottom is 2.5 cm to 5.5 cm above floor
- Refrigerator is in a secure location away from unauthorized/public access
- "Do Not Adjust Temperature" sign is posted beside fridge temperature mechanism, fridge temperature should be set to 4°C
- Refrigerator dedicated to storage of vaccines only, with "Vaccine Use Only" sign posted on fridge

Temperature Monitoring Set-Up

- Thermometer/probe located in centre of middle shelf
- Probe immersed in liquid glycol (recommended)
- For vaccine stored between +2°C and +8°C, thermometer alarms set at +3.5°C (min) and +6.5°C (max)
- Thermometers calibrated within at least ± 1°C by the manufacturer
- Thermometer inspected annually

Refrigerator Maintenance

- High touch areas *(such as door handles)* and visibly soiled areas cleaned daily
- Refrigerator compartment, coils and motor cleaned annually
- Refrigerator maintained annually *(at minimum)*
- Location of maintenance log _____

See AHS Vaccine Storage and Handling Guidelines at [Vaccine Storage and Handling | Alberta Health Services](#)

Packing/Transporting Equipment and Supplies

- Cooler(s) Portable freezers Frozen packs
- Refrigerated gel packs Bubble wrap *(or other insulating barrier)* Paper
- Portable temperature monitor(s)
- Facility has sufficient packing/transporting supplies to move entire vaccine inventory

Staff Training

- All staff *(clinical and non-clinical)* who handle or manage vaccine supplies have completed Vaccine Storage and Handling Training and review annually
- Type of Training e-Learning Training log up-to-date
- In-service Location of training log _____

Routine Vaccine Storage and Handling Procedures

Task	Staff Member(s) Responsible	Frequency
Coordinate overall vaccine storage, management, staff training and cold chain contingency response	Vaccine Controller	Ongoing
	Backup Vaccine Controller	
Monitor internal temperature of the refrigerator storing vaccines	Designated staff member(s)	Twice Daily <i>(or ongoing if 24/7 monitoring)</i>
Maintain temperature logs for a minimum of five (5) years	Designated staff member(s)	Ongoing
Order vaccine using the web-based Alberta Vaccine Inventory System	Designated staff member(s)	As needed
Receive, unpack and inspect vaccine shipments	Designated staff member(s) <i>(list all names)</i>	As needed
Conduct routine cleaning and maintenance of vaccine storage equipment	Vaccine Controller	Daily
	Designated staff member(s)	Weekly Monthly Quarterly
Maintain cold chain during transport and clinics	Vaccine Controller	As needed
	Designated staff member(s)	

Cold Chain Excursion Checklists
 Print & store the [Cold Chain Excursion Algorithm](#) with this plan *(check when complete)*
(✓) Checklist 1: Loss of Power

<input type="checkbox"/>	If applicable, confirm Uninterruptible Power Supply (UPS) or Emergency Power is functioning properly, verify the status of backup emergency generators and their fuel source amounts and notify Site Vaccine Controller immediately on the status of the systems.
If backup power not available or functioning:	
<input type="checkbox"/>	Confirm the vaccine refrigerator is plugged in.
<input type="checkbox"/>	Keep refrigerator door closed until ready to pack and transport vaccine to maintain temperature for as long as possible.
<input type="checkbox"/>	Contact vaccine coordinator and immediately initiate Checklist 3: Packing of Vaccines for Transport to move vaccines to alternate facility.
<input type="checkbox"/>	Confirm whether other plugged-in equipment is still working.
<input type="checkbox"/>	Check if power is affected throughout the area/facility.
<input type="checkbox"/>	If problem is specific to vaccine fridge, check fuse/circuit breaker <i>(or notify facility maintenance)</i> .
<input type="checkbox"/>	Contact electricity provider to determine if the issue is with the provider or if it is a site issue.
<input type="checkbox"/>	If the issue does not appear to be loss of power, refer to Checklist 2: Equipment Failure .

(✓) Checklist 2: Equipment Failure

<input type="checkbox"/>	If available, relocate vaccine supply to alternate refrigeration option and ensure temperature monitoring is maintained.
<input type="checkbox"/>	If no alternate refrigeration option available, contact Vaccine Controller and immediately initiate Checklist 3: Packing of Vaccines for Transport to move vaccines to alternate facility.
<input type="checkbox"/>	Contact Refrigerator Service/Repair Provider.
<input type="checkbox"/>	Retrieve maintenance logs and provide to Service/Repair Provider.
	Location of Maintenance Logs

(✓) Checklist 3: Packing of Vaccines for Transport

<input type="checkbox"/>	Insulated containers must demonstrate the ability to maintain the required temperature and must be large enough to store vaccines and packing materials.
<input type="checkbox"/>	External surfaces must be intact, strong, durable, clean, and the lid tight fitting.
<input type="checkbox"/>	The container must be clearly identified as containing valuable and fragile vaccines.
<input type="checkbox"/>	Vaccine should be packed in layers using the following materials: refrigerated and/or frozen packs, insulating barrier (<i>e.g. bubble wrap, crumpled brown packing paper, Styrofoam peanuts</i>), vaccine, a temperature monitor, and filler materials (<i>may be the same as those used as insulating barriers</i>) to prevent shifting of the contents during transport. The number and placement of refrigerated or frozen packs inside the container will depend on container size, outside temperature, and jurisdictional variations in storage and handling materials.
<input type="checkbox"/>	Frozen ice/gel packs: <ul style="list-style-type: none"> ▪ Must be stored in freezer a minimum of 24 hours and completely frozen prior to use. ▪ Use of bagged or loose ice is NOT acceptable.
<input type="checkbox"/>	Refrigerated gel packs: <ul style="list-style-type: none"> ▪ Must be stored between +2°C to +8°C. ▪ Must be stored in refrigerator a minimum of 24 hours prior to use.
<input type="checkbox"/>	Credo Cubes <ul style="list-style-type: none"> ▪ If using Credo Cubes, follow Zone specific and manufacturers recommendations for conditioning and packing
<input type="checkbox"/>	Be sure to place an insulating barrier (<i>e.g. bubble wrap, crumpled brown packing paper, styrofoam peanuts</i>) between the refrigerated or frozen packs and the vaccines to prevent accidental freezing. This is not applicable when transporting vaccines in frozen state.
<input type="checkbox"/>	Pack vaccines in their original packaging on top of the barrier. Do not remove vaccine vials from boxes. Be sure to fill any spaces between vaccine boxes with crumpled paper or other filler to prevent shifting of contents in the insulated container.
<input type="checkbox"/>	Use a properly placed min/max thermometer, data logger, or cold chain monitor near the vaccine. The temperature-monitoring device should be placed in the middle of the vaccines and should not come in contact with the refrigerated or frozen packs.
<input type="checkbox"/>	Record vaccine type(s), lot numbers, brand names, quantity, date, time and originating facility on a packing slip (<i>for example, an AVI print out</i>) to place on the inside of each container being packed.
<input type="checkbox"/>	Attach labels to the outside of the container to clearly identify the contents as being valuable, fragile, and temperature sensitive biological products that require refrigeration immediately upon shipment arrival.