Co	Temperature Log for Freezer – Celsius DAYS 1–15
	DAYS 1-15

М	onitor	temperatures	closely!

- 1. Write your initials below in "Staff Initials," and note the time in "Exact Time."
- 2. Record temps twice each workday.
- 3. Record the min/max temps once each workday—preferably in the morning.
- 4. Put an "X" in the row that corresponds to the freezer's temperature.
- 5. If any out-of-range temp, see instructions to the right.
- 6. After each month has ended, save each month's log for 3 years, unless state/local jurisdictions require a longer period.

Month/Year	VFC PIN or other ID #	Page 1 of 3
Facility Name		

Take action if temp is out of range—too warm (above -15°C) or too cold (below -50°C).

- 1. Label exposed vaccine "do not use," and store it under proper conditions as quickly as possible. Do not discard vaccines unless directed to by your state/local health department and/or the manufacturer(s).
- 2. Record the out-of-range temps and the room temp in the "Action" area on the bottom of the log.
- 3. Notify your vaccine coordinator, or call the immunization program at your state or local health department for guidance.
- 4. Document the action taken on the "Vaccine Storage Troubleshooting Record" on page 3.

Da	y of Month	1			2		3		4		5		6		7		3		9	1	0	1	1	1	2	1	3	1	4	1	5
Sta	aff Initials																														
Exa	act Time	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	АМ	PM	АМ	PM
	in/Max Temp nce previous reading)	i Language and a second	and the second seco	. and a second second	:	and the second second	:		: ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	and the second second	:	and the second second	: 		: parameter and a second	and the second second	:	and the second second	:	and the second second	:	and the second second	: 	and the second	: 	and the second	: 	. and a second second		and the second second	i Jacobane
Da	anger! Temperatu	res al	bove	-15°	C are	too w	arm!	Write	e any	out-o	f-rang	ge ten	nps a	nd ro	om te	emp c	n the	lines	s belo	w an	d call	your	state	or lo	cal he	alth	depar	tmen	t imm	edia	tely!
ES	-15°C																														
2	-16°C																														
RAT	-17°C																														
ΡE	-18°C																														
TEM	-19°C																														
Щ	-20°C																														
TAB	-21°C																														
CEP	-22°C																														
AC	-50°C to -23°C																														
NOIL	Write any out-of-range temps (above -15°C or below -50°C) here.																														
AC	Room Temperature																														

If you have a vaccine storage issue, also complete "Vaccine Storage Troubleshooting Record" found on page 3.

Co	Temperature Log for Freezer – Celsius DAYS 16-31
	DAYS 16-31

Monitor temperatures closel

- 1. Write your initials below in "Staff Initials," and note the time in "Exact Time."
- 2. Record temps twice each workday.
- 3. Record the min/max temps once each workday—preferably in the morning.
- 4. Put an "X" in the row that corresponds to the freezer's temperature.
- 5. If any out-of-range temp, see instructions to the right.
- 6. After each month has ended, save each month's log for 3 years, unless state/local jurisdictions require a longer period.

Month/Year	VFC PIN or other ID#	Page 2 of 3
Facility Name		

Take action if temp is out of range—too warm (above -15°C) or too cold (below -50°C).

- 1. Label exposed vaccine "do not use," and store it under proper conditions as quickly as possible. Do not discard vaccines unless directed to by your state/local health department and/or the manufacturer(s).
- 2. Record the out-of-range temps and the room temp in the "Action" area on the bottom of the log.
- 3. Notify your vaccine coordinator, or call the immunization program at your state or local health department for guidance.
- 4. Document the action taken on the "Vaccine Storage Troubleshooting Record" on page 3.

Da	y of Month	1	6	-	17	18	3	1	9	2	0	2	21	22		23	24		25	1	26	27		28	2	9	3	0	:	31
Sta	iff Initials																													
Exa	act Time	AM	РМ	АМ	PM	АМ	РМ	AM	РМ	АМ	PM	АМ	PM	AM PM	AM	l PM	AM PN	И	AM PM	АМ	PM	AM PN	M /	AM PM	АМ	PM	АМ	PM	АМ	PM
	n/Max Temp ace previous reading)	and the second second	i .		il		an and a second second		<u>:</u> 	and the second second			il		and the same of th			, and the second		and the second second	i i		Jane Park		and the second second	, and the second se			and the second	<u></u>
Da	inger! Temperati	ures	abov	e -15	°C ar	e too	war	m! W	rite a	ny oı	ıt-of-	rang	e tem	ps and re	oom	temp	on the li	ne	s below a	ınd c	all yo	ur state	or l	ocal hea	lth de	eparti	ment	imm	edia	itely!
ES	-15°C																													
UR	-16°C																													
RAT	-17°C																													
MPE	-18°C																													
TEN	-19°C																													
LE	-20°C																													
TAB	-21°C																													
CEP	-22°C																													
ΑC	-50°C to -23°C																													
TION	Write any out-of-range temps (above -15°C or below -50°C) here.																													
A C]	Room Temperature																													

If you have a vaccine storage issue, also complete "Vaccine Storage Troubleshooting Record" found on page 3.

Vaccine Storage Troubleshooting Record	(check one) Refrigerator	Freezer
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Use this form to document any unacceptable vaccine storage event, such as exposure of refrigerated or frozen vaccines to temperatures that are outside the manufacturers' recommended storage ranges.

A fillable troubleshooting record (i.e., editable PDF or WORD document) can also be found at www.immunize.org/clinic/storage-handling.asp.

^	illiable troubleshooting recor	d (i.e., editable FDI of we	ond document, can also be found at www.iiiiiidiiiz	e.org/chilic/storage-handing.asp.	
Date & Time of Event If multiple, related events occurred, see Description of Event below.	Storage Unit Tempera at the time the problem w	ature as discovered	Room Temperature at the time the problem was discovered	Person Completing Report	
Date:	Temp when discovered:		Temp when discovered:	Name:	
Time:	Minimum temp:	Maximum temp:	Comment (optional):	Title:	Date:
 Inventory of affected vaccines, inc 	opened?) event and last documented rea luding (1) lot #s and (2) wheth was in the storage unit? For ex n any storage problems with th	ading of storage temperatur er purchased with public (fo kample, were there water bo is unit and/or with the affec	re in acceptable range (35° to 46°F [2° to 8°C] for refrige or example, VFC) or private funds (Use separate sheet ottles in the refrigerator and/or frozen coolant packs in	if needed, but maintain the inventory with thi	s troubleshooting record.)
local health department and/or th	placed in proper storage condit e manufacturer[s].)	ions? (Note: Do not discard	the vaccine. Store exposed vaccine in proper condition	ons and label it "do not use" until after you ca	n discuss with your state/
Who was contacted regarding theIMPORTANT: What did you do to	incident? (For example, superv prevent a similar problem fron	visor, state/local health depand occurring in the future?	artment, manufacturer—list all.)		
Results • What happened to the vaccine? W.	as it able to be used? If not, wa	is it returned to the distribut	tor? (Note: For public-purchase vaccine, follow your st	ate/local health department instructions for v	accine disposition.)

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Vaccine Storage Troubleshooting Record (check one) ☐ Refrigerator ☐ Freezer

Use this form to document any unacceptable vaccine storage event, such as exposure of refrigerated or frozen vaccines to temperatures that are outside the manufacturers' recommended storage ranges. A fillable troubleshooting record (i.e., editable pdf or WORD document) can also be found at www.immunize.org/clinic/storage-handling.asp

	Storage Unit Tempera at the time the problem wa		Room Temperature at the time the problem was discovered	Person Completing Report						
Date: 7/16/2013	Temp when discovered: 1	3°C	Temp when discovered: 25° ${\cal C}$	Name: Nancy Nurse						
Time: 8:00 am	Minimum temp: −17°C	Maximum temp: 14°C	Comment (optional): temp is approx	Title: VFC Coordinator	Date: 7/15/13					

Description of Event (If multiple, related events occurred, list each date, time, and length of time out of storage.)

- General description (i.e., what happened?)
- Estimated length of time between event & last documented reading of storage temperature in acceptable range (35° to 46°F [2° to 8°C] for refrigerator; -58° to 5°F [-50° to -15°C] for freezer)
- Inventory of affected vaccines, including (1) lot #s and (2) whether purchased with public (for example, VFC) or private funds (Use separate sheet if needed, but maintain the inventory with this troubleshooting record)
- At the time of the event, what else was in the storage unit? For example, were there water bottles in the refrigerator and/or frozen coolant packs in the freezer?
- · Prior to this event, have there been any storage problems with this unit and/or with the affected vaccine?
- Include any other information you feel might be relevant to understanding the event.

When checked vaccine freezer (in lab) at 8:00 am on Tuesday, 7/16/2013, discovered freezer door slightly ajar. Digital readout on data logger read 13°C. Data logger located in center of freezer with probe in glycol. Review of computer readings (taken every 15 minutes) showed steady rise in temps from -17°C at 5:30 pm (7/15/2013) to 13°C reading discovered when arrived at clinic on Tuesday morning (7/16/2013). Readings hit -14°C at 11 pm (7/15) and 7°C at 2 am (7/16). Total time out of recommended storage temp of -15°C or below = 9 hours. (See attached document of continuous temp readings.) Freezer contained Varivax, ProQuad, and Zostavax (inventory attached).

Frozen packs stored on freezer floor and shelves in door. No recent adjustments to temp controls and no previous temp excursions noted with this freezer before 7/15.

Action Taken (Document thoroughly. This information is critical to determining whether the vaccine might still be viable!)

- When were the affected vaccines placed in proper storage conditions? (Note: Do not discard the vaccine. Store exposed vaccine in proper conditions and label it "do not use" until after you can discuss with your state/local health department and/or the manufacturer[s].)
- Who was contacted regarding the incident? (For example, supervisor, state/local health department, manufacturer—list all.)
- IMPORTANT: What did you do to prevent a similar problem from occurring in the future?

Upon discovery, vaccines marked "Do Not Use" and stored in 2nd clinic freezer (in exam room #3) at -17°C. Also placed "Do Not Use" note on main freezer in lab. Notified Surie Supervisor about the issue. Confacted Victor Vaccine at My State Immunization Program at 8:30 am. Provided Victor with details of event and list of vaccines in freezer. Victor said to maintain vaccines in 2nd freezer and that he would check with Merck (manufacturer of all the affected vaccines) to determine next steps. Called Jim's Appliance Repair to examine freezer. Repairman replaced freezer door gasket and recommended removal of ~1/2 of freezer packs in door because size and weight of packs potentially interfered with door closing completely. No problems identified with thermostat or other mechanical components.

Removed half of freezer packs located in shelf in door, per recommendation. Reset data logger on center shelf of freezer with probe in glycol. All staff received refresher training on ensuring freezer door is closed after each use, and a reminder sign was placed prominently on freezer door.

Results

• What happened to the vaccine? Was it able to be used? If not, was it returned to the distributor? (Note: For public-purchase vaccine, follow your state/local health department instructions for vaccine disposition.)

After repair, monitored temps in empty freezer for 1 week, per state requirements. Freezer maintained -18° to -17°C temps for entire week. Submitted repair documentation and data logger readings to Victor Vaccine for approval and ordered replacement vaccines. Victor had checked with manufacturer. After reviewing history and stability data, manufacturer stated vaccine was acceptable for continued use. Discussed entire situation with Susie Supervisor and clinic director, Dr. Immunize, who agreed on continued use of vaccine. Vaccine to be labeled as "use first."