Section 7 – APPENDIX III

Immunization Forms and Resources

Maryland Immunization Certification Form ***Updated 2015***

Maryland Recommended Childhood and Adolescent Immunization Schedule
(Includes Child/Adolescent "Catch up" Schedule) ***Updated 2017***

Maryland Suggested Combination Vaccines Schedule
Updated 2017

Parental Delegation Form for Minors

VFC Vaccine Inventory Form ***Updated 2015***

VFC Log of Children Receiving VFC Vaccines ***Updated 2013***

VFC Patient Eligibility Screening Record ***Updated 2015***

VFC Program Contact Center ***Updated 2016***

VFC Vaccine Administration Record ***Updated 2017***

VFC Vaccine Return and Wastage Form ***Updated 2015***

VFC Temperature Log for Refrigerator-Celsius
Updated 2017

VFC Temperature Log for Refrigerator-Fahrenheit ***Updated 2017***

VFC Temperature Log for Freezer-Celsius ***Updated 2017***

VFC Temperature Log for Freezer-Fahrenheit
Updated 2017

MARYLAND DEPARTMENT OF HEALTH AND MENTAL HYGIENE IMMUNIZATION CERTIFICATE

CHILD'S NAME_____
LAST FIRST MI

SEX: MALE ☐ FEMALE ☐ BIRTHDATE_____/_____/_____

COUNTY _____ SCHOOL_____ GRADE_____

PARENT OR GUARDIAN NAME _____ PHONE NO. _____

ADDRESS _____ CITY _____ ZIP_____

RECORD OF IMMUNIZATIONS (See Notes On Other Side)

Vaccines Type

Dose #	DTP-DTaP-DT Mo/Day/Yr	Polio Mo/Day/Yr	Hib Mo/Day/Yr	Hep B Mo/Day/Yr	PCV Mo/Day/Yr	Rotavirus Mo/Day/Yr	MCV Mo/Day/Yr	HPV Mo/Day/Yr	Dose #	Hep A Mo/Day/Yr	MMR Mo/Day/Yr	Varicella Mo/Day/Yr	History of Varicella Disease
1									1				Mo/Yr
2									2				
3										Td Mo/Day/Yr	Tdap Mo/Day/Yr	FLU Mo/Day/Yr	Other Mo/Day/Yr
4										_____	_____	_____	_____
5										_____	_____	_____	_____
										_____			

To the best of my knowledge, the vaccines listed above were administered as indicated.

Clinic / Office Name
Office Address/ Phone Number

1. _____
Signature Title Date
(Medical provider, local health department official, school official, or child care provider only)

2. _____
Signature Title Date

3. _____
Signature Title Date

Lines 2 and 3 are for certification of vaccines given after the initial signature.

COMPLETE THE APPROPRIATE SECTION BELOW IF THE CHILD IS EXEMPT FROM VACCINATION ON MEDICAL OR RELIGIOUS GROUNDS. ANY VACCINATION(S) THAT HAVE BEEN RECEIVED SHOULD BE ENTERED ABOVE.

MEDICAL CONTRAINDICATION:

Please check the appropriate box to describe the medical contraindication.

This is a: ☐ Permanent condition OR ☐ Temporary condition until _____/_____/_____
Date

The above child has a valid medical contraindication to being vaccinated at this time. Please indicate which vaccine(s) and the reason for the contraindication, _____

Signed: _____ Date _____
Medical Provider / LHD Official

RELIGIOUS OBJECTION:

I am the parent/guardian of the child identified above. Because of my bona fide religious beliefs and practices, I object to any vaccine(s) being given to my child. This exemption does not apply during an emergency or epidemic of disease.

Signed: _____ Date: _____

How To Use This Form

The medical provider that gave the vaccinations may record the dates (using month/day/year) directly on this form (check marks are not acceptable) and certify them by signing the signature section. Combination vaccines should be listed individually, by each component of the vaccine. A different medical provider, local health department official, school official, or child care provider may transcribe onto this form and certify vaccination dates from any other record which has the authentication of a medical provider, health department, school, or child care service.

Only a medical provider, local health department official, school official, or child care provider may sign 'Record of Immunization' section of this form. This form may not be altered, changed, or modified in any way.

Notes:

1. When immunization records have been lost or destroyed, vaccination dates may be reconstructed for all vaccines except **varicella, measles, mumps, or rubella.**

2. Reconstructed dates for all vaccines must be reviewed and approved by a medical provider or local health department no later than 20 calendar days following the date the student was temporarily admitted or retained.

3. Blood test results are NOT acceptable evidence of immunity against diphtheria, tetanus, or pertussis (DTP/DTaP/Tdap/DT/Td).

4. Blood test verification of immunity is acceptable in lieu of polio, measles, mumps, rubella, hepatitis B, or varicella vaccination dates, but **revaccination may be more expedient**.

5. History of disease is NOT acceptable in lieu of any of the required immunizations, except varicella.

Immunization Requirements

The following excerpt from the DHMH Code of Maryland Regulations (COMAR) 10.06.04.03 applies to schools:

"A preschool or school principal or other person in charge of a preschool or school, public or private, may not knowingly admit a student to or retain a student in a:
(1) Preschool program unless the student's parent or guardian has furnished evidence of age appropriate immunity against Haemophilus influenzae, type b, and pneumococcal disease;
(2) Preschool program or kindergarten through the second grade of school unless the student's parent or guardian has furnished evidence of age-appropriate immunity against pertussis; and
(3) Preschool program or kindergarten through the 12th grade unless the student's parent or guardian has furnished evidence of age-appropriate immunity against: (a) Tetanus; (b) Diphtheria; (c) Poliomyelitis; (d) Measles (rubeola); (e) Mumps; (f) Rubella; (g) Hepatitis B; (h) Varicella; (i) Meningitis; and (j) Tetanus-diphtheria-acellular pertussis acquired through a Tetanus-diphtheria-acellular pertussis (Tdap) vaccine."

Please refer to the "**Minimum Vaccine Requirements for Children Enrolled in Pre-school Programs and in Schools**" to determine age-appropriate immunity for preschool through grade 12 enrollees. The minimum vaccine requirements and DHMH COMAR 10.06.04.03 are available at www.dhmh.maryland.gov. (Choose Immunization in the A-Z Index)

Age-appropriate immunization requirements for licensed childcare centers and family day care homes are based on the Department of Human Resources COMAR 13A.15.03.02 and COMAR 13A.16.03.04 G & H and the **"Age-Appropriate Immunizations Requirements for Children Enrolled in Child Care Programs"** guideline chart are available at www.dhmh.maryland.gov. (Choose Immunization in the A-Z Index)

Maryland Department of Health and Mental Hygiene

2017 Recommended Childhood Immunization Schedule

Vaccine ▼ / Age ►	Birth	2 months	4 months	6 months	12 months	15 months	18 months	2-3 years	4-6 years
Hepatitis B[1]	**Hep B**	**Hep B**		**Hep B**					
Rotavirus[2]		**RV**	**RV**	**RV**					
Diphtheria, tetanus, & acellular pertussis[3]		**DTaP**	**DTaP**	**DTaP**		**DTaP**			**DTaP**
Haemophilus Influenzae type b[4]		**Hib**	**Hib**	**Hib**		**Hib**			**Hib**
Pneumococcal Conjugate[5]		**PCV13**	**PCV13**	**PCV13**	**PCV13**				**PCV 13**
Pneumococcal Polysaccharide[5]								**PPSV23**	
Inactivated Poliovirus[6]		**IPV**	**IPV**	**IPV**					**IPV**
Influenza[7]				**INFLUENZA (YEARLY)**					
Measles, Mumps, Rubella[8]				**MMR**	**MMR**				**MMR**
Varicella[9]					**Var**				**Var**
Hepatitis A[10]					**Hep A**		**Hep A**	**Hep A**	
Meningococcal[11]		**Meningococcal**							

Catch-Up Vaccination **Certain High-Risk Groups**

Please see reverse side for footnotes

This schedule includes recommendations in effect as of January 01, 2017. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Clinically significant adverse events that follow vaccination should be reported to the Vaccine Adverse Event Reporting System (VAERS) online (http://www.vaers.hhs.gov) or by telephone (800-822-7967)

Approved by MedChi - The Maryland State Medical Society

www.dhmh.maryland.gov **Center for Immunization** **dhmh.IZinfo@maryland.gov**

Maryland Department of Health and Mental Hygiene

2017 Recommended Adolescent Immunization Schedule

Vaccine \ Age	7 - 10 Years	11-12 Years	13 –18 Years
Tetanus, Diphtheria, Pertussis[12]	Tdap (if indicated)	Tdap	Tdap
Human Papillomavirus[13]	HPV	HPV	HPV
Meningococcal[11]	MCV4	MCV4	MCV4 Booster At Age 16
Influenza[7]	Influenza (Yearly)		
Hepatitis B[1]	Complete Hep B Series		
Inactivated Polio[6]	Complete Inactivated Polio		
Measles, Mumps, Rubella[8]	Complete MMR Series		
Varicella[9]	Complete Varicella Series		
Hepatitis A[10]	Complete Hep A Series and/or High Risk Groups		
Meningococcal B[11]	Meningococcal B		Ages 16—18
Pneumococcal[5]	Pneumococcal		
Haemophilus Influenzae type b[4]	Haemophilus Influenzae type b		

Please see reverse side for footnotes

Do not restart any series when there is proof of prior vaccination, just complete series by administering missing doses.

Recommended ages for all Adolescents | **Catch-Up Vaccination** | **Certain High-Risk Groups** | **Non-high risk groups subject to clinical decision making**

This schedule includes recommendations in effect as of January 01, 2017. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Clinically significant adverse events that follow vaccination should be reported to the Vaccine Adverse Event Reporting System (VAERS) online (http://www.vaers.hhs.gov) or by telephone (800-822-7967).

Approved by MedChi—The Maryland State Medical Society

www.dhmh.maryland.gov **Center for Immunization** **dhmh.IZinfo@maryland.gov**

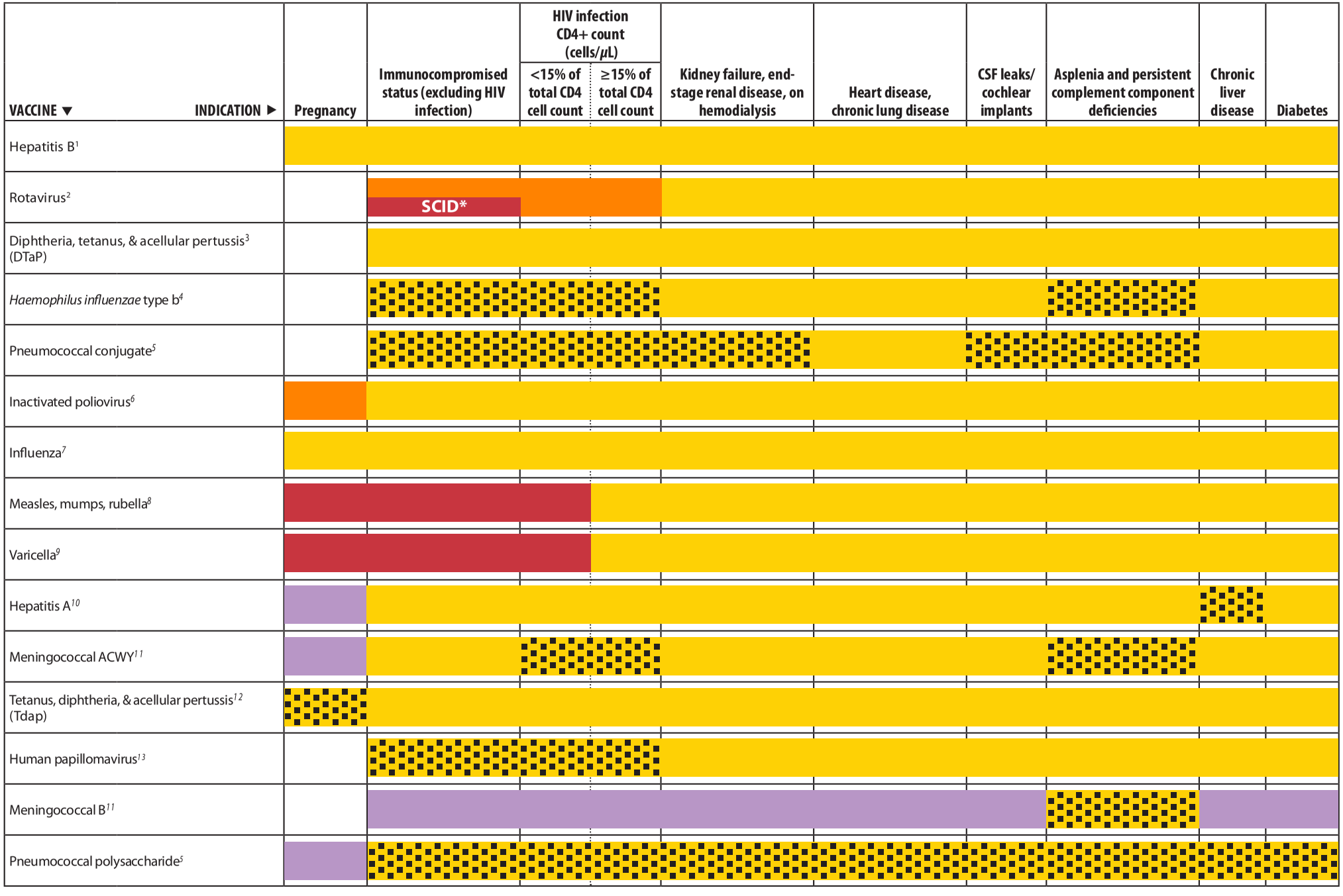
FIGURE 2. Catch-up immunization schedule for persons aged 4 months through 18 years who start late or who are more than 1 month behind—United States, 2017.

The figure below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age. Always use this table in conjunction with Figure 1 and the footnotes that follow.

Children age 4 months through 6 years					
Vaccine	Minimum Age for Dose 1	Minimum Interval Between Doses			
		Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose 5
Hepatitis B[1]	Birth	4 weeks	8 weeks *and* at least 16 weeks after first dose. Minimum age for the final dose is 24 weeks.		
Rotavirus[2]	6 weeks	4 weeks	4 weeks[2]		
Diphtheria, tetanus, and acellular pertussis[3]	6 weeks	4 weeks	4 weeks	6 months	6 months[3]
Haemophilus influenzae type b[4]	6 weeks	4 weeks if first dose was administered before the 1st birthday. 8 weeks (as final dose) if first dose was administered at age 12 through 14 months. No further doses needed if first dose was administered at age 15 months or older.	4 weeks[4] if current age is younger than 12 months **and** first dose was administered at younger than age 7 months, **and** at least 1 previous dose was PRP-T (ActHib, Pentacel, Hiberix) or unknown. 8 weeks *and* age 12 through 59 months (as final dose)[4] • if current age is younger than 12 months **and** first dose was administered at age 7 through 11 months; OR • if current age is 12 through 59 months **and** first dose was administered before the 1st birthday, **and** second dose administered at younger than 15 months; OR • if both doses were PRP-OMP (PedvaxHIB; Comvax) **and** were administered before the 1st birthday. No further doses needed if previous dose was administered at age 15 months or older.	8 weeks (as final dose) This dose only necessary for children age 12 through 59 months who received 3 doses before the 1st birthday.	
Pneumococcal[5]	6 weeks	4 weeks if first dose administered before the 1st birthday. 8 weeks (as final dose for healthy children) if first dose was administered at the 1st birthday or after. No further doses needed for healthy children if first dose was administered at age 24 months or older.	4 weeks if current age is younger than 12 months and previous dose given at <7 months old. 8 weeks (as final dose for healthy children) if previous dose given between 7-11 months (wait until at least 12 months old); OR if current age is 12 months or older and at least 1 dose was given before age 12 months. No further doses needed for healthy children if previous dose administered at age 24 months or older.	8 weeks (as final dose) This dose only necessary for children aged 12 through 59 months who received 3 doses before age 12 months or for children at high risk who received 3 doses at any age.	
Inactivated poliovirus[6]	6 weeks	4 weeks[6]	4 weeks[6]	6 months[6] (minimum age 4 years for final dose).	
Measles, mumps, rubella[8]	12 months	4 weeks			
Varicella[9]	12 months	3 months			
Hepatitis A[10]	12 months	6 months			
Meningococcal[11] (Hib-MenCY ≥6 weeks; MenACWY-D ≥9 mos; MenACWY-CRM ≥2 mos)	6 weeks	8 weeks[11]	See footnote 11	See footnote 11	
Children and adolescents age 7 through 18 years					
Meningococcal[11] (MenACWY-D ≥9 mos; MenACWY-CRM ≥2 mos)	Not Applicable (N/A)	8 weeks[11]			
Tetanus, diphtheria; tetanus, diphtheria, and acellular pertussis[12]	7 years[12]	4 weeks	4 weeks if first dose of DTaP/DT was administered before the 1st birthday. 6 months (as final dose) if first dose of DTaP/DT or Tdap/Td was administered at or after the 1st birthday.	6 months if first dose of DTaP/DT was administered before the 1st birthday.	
Human papillomavirus[13]	9 years	Routine dosing intervals are recommended.[13]			
Hepatitis A[10]	N/A	6 months			
Hepatitis B[1]	N/A	4 weeks	8 weeks **and** at least 16 weeks after first dose.		
Inactivated poliovirus[6]	N/A	4 weeks	4 weeks[6]	6 months[6]	
Measles, mumps, rubella[8]	N/A	4 weeks			
Varicella[9]	N/A	3 months if younger than age 13 years. 4 weeks if age 13 years or older.			

NOTE: The above recommendations must be read along with the footnotes of this schedule.

Figure 3. Vaccines that might be indicated for children and adolescents aged 18 years or younger based on medical indications



*Severe Combined Immunodeficiency

NOTE: The above recommendations must be read along with the footnotes of this schedule.

Footnotes — Recommended Immunization Schedule for Children and Adolescents Aged 18 Years or Younger, UNITED STATES, 2017

For further guidance on the use of the vaccines mentioned below, see: www.cdc.gov/vaccines/hcp/acip-recs/index.html.
For vaccine recommendations for persons 19 years of age and older, see the Adult Immunization Schedule.

Additional information

- For information on contraindications and precautions for the use of a vaccine and for additional information regarding that vaccine, vaccination providers should consult the ACIP General Recommendations on Immunization and the relevant ACIP statement, available online at www.cdc.gov/vaccines/hcp/acip-recs/index.html.
- For purposes of calculating intervals between doses, 4 weeks = 28 days. Intervals of 4 months or greater are determined by calendar months.
- Vaccine doses administered ≤4 days before the minimum interval are considered valid. Doses of any vaccine administered ≥5 days earlier than the minimum interval or minimum age should not be counted as valid doses and should be repeated as age-appropriate. The repeat dose should be spaced after the invalid dose by the recommended minimum interval. For further details, see Table 1, *Recommended and minimum ages and intervals between vaccine doses, in MMWR, General Recommendations on Immunization and Reports / Vol. 60 / No. 2,* available online at www.cdc.gov/mmwr/pdf/rr/rr6002.pdf.
- Information on travel vaccine requirements and recommendations is available at wwwnc.cdc.gov/travel/.
- For vaccination of persons with primary and secondary immunodeficiencies, see Table 13, *Vaccination of persons with primary and secondary immunodeficiencies,* in *General Recommendations on Immunization* (ACIP), available at www.cdc.gov/mmwr/pdf/rr/rr6002.pdf.; and Immunization in Special Clinical Circumstances, (American Academy of Pedatrics). In: Kimberlin DW, Brady MT, Jackson MA, Long SS, eds. *Red Book: 2015 report of the Committee on Infectious Diseases. 30th ed.* Elk Grove Village, IL: American Academy of Pediatrics, 2015:68-107.
- The National Vaccine Injury Compensation Program (VICP) is a no-fault alternative to the traditional legal system for resolving vaccine injury petitions. Created by the National Childhood Vaccine Injury Act of 1986, it provides compensation to people found to be injured by certain vaccines. All vaccines within the recommended childhood immunization schedule are covered by VICP except for pneumococcal polysaccharide vaccine (PPSV23). For more information; see www.hrsa.gov/vaccinecompensation/index.html.

1. **Hepatitis B (HepB) vaccine. (Minimum age: birth)**
Routine vaccination:
At birth:
   - Administer monovalent HepB vaccine to all newborns within 24 hours of birth.
   - For infants born to hepatitis B surface antigen (HBsAg)-positive mothers, administer HepB vaccine and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth. These infants should be tested for HBsAg and antibody to HBsAg (anti-HBs) at age 9 through 12 months (preferably at the next well-child visit) or 1 to 2 months after completion of the HepB series if the series was delayed.
   - If mother's HBsAg status is unknown, within 12 hours of birth, administer HepB vaccine regardless of birth weight. For infants weighing less than 2,000 grams, administer HBIG in addition to HepB vaccine within 12 hours of birth. Determine mother's HBsAg status as soon as possible and, if mother is HBsAg-positive, also administer HBIG to infants weighing 2,000 grams or more as soon as possible, but no later than age 7 days.

   Doses following the birth dose:
   - The second dose should be administered at age 1 or 2 months. Monovalent HepB vaccine should be used for doses administered before age 6 weeks.
   - Infants who did not receive a birth dose should receive 3 doses of a HepB-containing vaccine on a schedule of 0, 1 to 2 months, and 6 months, starting as soon as feasible (see figure 2).
   - Administer the second dose 1 to 2 months after the first dose (minimum interval of 4 weeks); administer the third dose at least 8 weeks after the second dose AND at least 16 weeks after the **first** dose. The final (third or fourth) dose in the HepB vaccine series should be administered **no earlier than age 24 weeks**.
   - Administration of a total of 4 doses of HepB vaccine is permitted when a combination vaccine containing HepB is administered after the birth dose.

   Catch-up vaccination:
   - Unvaccinated persons should complete a 3-dose series.
   - A 2-dose series (doses separated by at least 4 months) of adult formulation Recombivax HB is licensed for use in children aged 11 through 15 years.
   - For other catch-up guidance, see Figure 2.

2. **Rotavirus (RV) vaccines. (Minimum age: 6 weeks for both RV1 [Rotarix] and RV5 [RotaTeq])**
Routine vaccination:
Administer a series of RV vaccine to all infants as follows:
   1. If Rotarix is used, administer a 2-dose series at ages 2 and 4 months.
   2. If RotaTeq is used, administer a 3-dose series at ages 2, 4, and 6 months.
   3. If any dose in the series was RotaTeq or vaccine product is unknown for any dose in the series, a total of 3 doses of RV vaccine should be administered.

   Catch-up vaccination:
   - The maximum age for the first dose in the series is 14 weeks, 6 days; vaccination should not be initiated for infants aged 15 weeks, 0 days, or older.
   - The maximum age for the final dose in the series is 8 months, 0 days.
   - For other catch-up guidance, see Figure 2.

3. **Diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine. (Minimum age: 6 weeks. Exception: DTaP-IPV [Kinrix, Quadracel]: 4 years)**
Routine vaccination:
   - Administer a 5-dose series of DTaP vaccine at ages 2, 4, 6, 15 through 18 months, and 4 through 6 years. The fourth dose may be administered as early as age 12 months, provided at least 6 months have elapsed since the third dose.
   - Inadvertent administration of fourth DTaP dose early: If the fourth dose of DTaP was administered at least 4 months after the third dose of DTaP and the child was 12 months of age or older, it does not need to be repeated.

   Catch-up vaccination:
   - The fifth dose of DTaP vaccine is not necessary if the fourth dose was administered at age 4 years or older.
   - For other catch-up guidance, see Figure 2.

4. ***Haemophilus influenzae* type b (Hib) conjugate vaccine. (Minimum age: 6 weeks for PRP-T [ActHIB, DTaP-IPV/Hib (Pentacel), Hiberix, and Hib-MenCY (MenHibrix)], PRP-OMP [PedvaxHIB])**
Routine vaccination:
   - Administer a 2- or 3-dose Hib vaccine primary series and a booster dose (dose 3 or 4, depending on vaccine used in primary series) at age 12 through 15 months to complete a full Hib vaccine series.
   - The primary series with ActHIB, MenHibrix, Hiberix, or Pentacel consists of 3 doses and should be administered at ages 2, 4, and 6 months. The primary series with PedvaxHIB consists of 2 doses and should be administered at ages 2 and 4 months; a dose at age 6 months is not indicated.
   - One booster dose (dose 3 or 4, depending on vaccine used in primary series) of any Hib vaccine should be administered at age 12 through 15 months.
   - For recommendations on the use of MenHibrix in patients at increased risk for meningococcal disease, refer to the meningococcal vaccine footnotes and also to *MMWR* February 28, 2014 / 63(RR01):1-13, available at www.cdc.gov/mmwr/PDF/rr/rr6301.pdf.

For further guidance on the use of the vaccines mentioned below, see: www.cdc.gov/vaccines/hcp/acip-recs/index.html.

Catch-up vaccination:

- If dose 1 was administered at ages 12 through 14 months, administer a second (final) dose at least 8 weeks after dose 1, regardless of Hib vaccine used in the primary series.
- If both doses were PRP-OMP (PedvaxHIB or COMVAX) and were administered before the first birthday, the third (and final) dose should be administered at age 12 through 59 months and at least 8 weeks after the second dose.
- If the first dose was administered at age 7 through 11 months, administer the second dose at least 4 weeks later and a third (and final) dose at age 12 through 15 months or 8 weeks after second dose, whichever is later.
- If first dose is administered before the first birthday and second dose administered at younger than 15 months, a third (and final) dose should be administered 8 weeks later.
- For unvaccinated children aged 15–59 months, administer only 1 dose.
- For other catch-up guidance, see Figure 2. For catch-up guidance related to MenHibrix, see the meningococcal vaccine footnotes and also *MMWR* February 28, 2014 / 63(RR01):1-13, available at www.cdc.gov/mmwr/PDF/rr/rr6301.pdf.

Vaccination of persons with high-risk conditions:

Children aged 12 through 59 months who are at increased risk for Hib disease, including chemotherapy recipients and those with anatomic or functional asplenia (including sickle cell disease), human immunodeficiency virus (HIV) infection, immunoglobulin deficiency, or early component complement deficiency, who have received either no doses or only 1 dose of Hib vaccine before age 12 months, should receive 2 additional doses of Hib vaccine, 8 weeks apart; children who received 2 or more doses of Hib vaccine before age 12 months should receive 1 additional dose.

- For patients younger than age 5 years undergoing chemotherapy or radiation treatment who received a Hib vaccine dose(s) within 14 days of starting therapy or during therapy, repeat the dose(s) at least 3 months following therapy completion.
- Recipients of hematopoietic stem cell transplant (HSCT) should be revaccinated with a 3-dose regimen of Hib vaccine starting 6 to 12 months after successful transplant, regardless of vaccination history; doses should be administered at least 4 weeks apart.
- A single dose of any Hib-containing vaccine should be administered to unimmunized* children and adolescents 15 months of age and older undergoing an elective splenectomy; if possible, vaccine should be administered at least 14 days before procedure.
- Hib vaccine is not routinely recommended for patients 5 years or older. However, 1 dose of Hib vaccine should be administered to unimmunized* persons aged 5 years or older who have anatomic or functional asplenia (including sickle cell disease) and unimmunized* persons 5 through 18 years of age with HIV infection.

** Patients who have not received a primary series and booster dose or at least 1 dose of Hib vaccine after 14 months of age are considered unimmunized.*

5. **Pneumococcal vaccines. (Minimum age: 6 weeks for PCV13, 2 years for PPSV23)**

Routine vaccination with PCV13:

- Administer a 4-dose series of PCV13 at ages 2, 4, and 6 months and at age 12 through 15 months.

Catch-up vaccination with PCV13:

- Administer 1 dose of PCV13 to all healthy children aged 24 through 59 months who are not completely vaccinated for their age.
- For other catch-up guidance, see Figure 2.

Vaccination of persons with high-risk conditions with PCV13 and PPSV23:

- All recommended PCV13 doses should be administered prior to PPSV23 vaccination if possible.
- For children aged 2 through 5 years with any of the following conditions: chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure); chronic lung disease (including asthma if treated with high-dose oral corticosteroid therapy); diabetes mellitus; cerebrospinal fluid leak; cochlear implant; sickle cell disease and other hemoglobinopathies; anatomic or functional asplenia; HIV infection; chronic renal failure; nephrotic syndrome; diseases associated with treatment with immunosuppressive drugs or radiation therapy, including malignant neoplasms, leukemias, lymphomas, and Hodgkin disease; solid organ transplantation; or congenital immunodeficiency:
  1. Administer 1 dose of PCV13 if any incomplete schedule of 3 doses of PCV13 was received previously.
  2. Administer 2 doses of PCV13 at least 8 weeks apart if unvaccinated or any incomplete schedule of fewer than 3 doses of PCV13 was received previously.
  3. The minimum interval between doses of PCV13 is 8 weeks.
  4. For children with no history of PPSV23 vaccination, administer PPSV23 at least 8 weeks after the most recent dose of PCV13.
- For children aged 6 through 18 years who have cerebrospinal fluid leak; cochlear implant; sickle cell disease and other hemoglobinopathies; anatomic or functional asplenia; congenital or acquired immunodeficiencies; HIV infection; chronic renal failure; nephrotic syndrome; diseases associated with treatment with immunosuppressive drugs or radiation therapy, including malignant neoplasms, leukemias, lymphomas, and Hodgkin disease; generalized malignancy; solid organ transplantation; or multiple myeloma:
  1. If neither PCV13 nor PPSV23 has been received previously, administer 1 dose of PCV13 now and 1 dose of PPSV23 at least 8 weeks later.
  2. If PCV13 has been received previously but PPSV23 has not, administer 1 dose of PPSV23 at least 8 weeks after the most recent dose of PCV13.
  3. If PPSV23 has been received but PCV13 has not, administer 1 dose of PCV13 at least 8 weeks after the most recent dose of PPSV23.
- For children aged 6 through 18 years with chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure), chronic lung disease (including asthma if treated with high-dose oral corticosteroid therapy), diabetes mellitus, alcoholism, or chronic liver disease, who have not received PPSV23, administer 1 dose of PPSV23. If PCV13 has been received previously, then PPSV23 should be administered at least 8 weeks after any prior PCV13 dose.
- A single revaccination with PPSV23 should be administered 5 years after the first dose to children with sickle cell disease or other hemoglobinopathies; anatomic or functional asplenia; congenital or acquired immunodeficiencies; HIV infection; chronic renal failure; nephrotic syndrome; diseases associated with treatment with immunosuppressive drugs or radiation therapy, including malignant neoplasms, leukemias, lymphomas, and Hodgkin disease; generalized malignancy; solid organ transplantation; or multiple myeloma.

6. **Inactivated poliovirus vaccine (IPV). (Minimum age: 6 weeks)**

Routine vaccination:

- Administer a 4-dose series of IPV at ages 2, 4, 6 through 18 months, and 4 through 6 years. The final dose in the series should be administered on or after the fourth birthday and at least 6 months after the previous dose.

Catch-up vaccination:

- In the first 6 months of life, minimum age and minimum intervals are only recommended if the person is at risk of imminent exposure to circulating poliovirus (i.e., travel to a polio-endemic region or during an outbreak).
- If 4 or more doses are administered before age 4 years, an additional dose should be administered at age 4 through 6 years and at least 6 months after the previous dose.
- A fourth dose is not necessary if the third dose was administered at age 4 years or older and at least 6 months after the previous dose.
- If both oral polio vaccine (OPV) and IPV were administered as part of a series, a total of 4 doses should be administered, regardless of the child's current age. If only OPV was administered, and all doses were given prior to age 4 years, 1 dose of IPV should be given at 4 years or older, at least 4 weeks after the last OPV dose.
- IPV is not routinely recommended for U.S. residents aged 18 years or older.
- For other catch-up guidance, see Figure 2.

MARYLAND
Department of Health

Maryland Suggested Immunization Schedule Using Combination Vaccines

Schedule Using PEDIARIX® & KINRIX®

Birth	2 Months	4 Months	6 Months	12Months	15 Months	18 Months	4-6 Years
HepB	PEDIARIX® DTaP, IPV, HepB + PVC13 + Rotavirus + Hib	PEDIARIX® DTaP, IPV, HepB + PVC13 + Rotavirus + Hib	PEDIARIX® DTaP, IPV, HepB + PVC13 + Rotavirus + Hib	HepA, MMR, Varicella, PVC13	DTaP, Hib	HepA	KINRIX® DTaP, IPV + MMR + Varicella

EVERY FALL: FLU VACCINE for anyone 6 months and older

Schedule Using PENTACEL® & QUADRACEL®

Birth	2 Months	4 Months	6 Months	12Months	15 Months	18 Months	4-6 Years
HepB	PENTACEL® DTaP, IPV, Hib + PVC13 + Rotavirus + HepB	PENTACEL® DTaP, IPV, Hib + PVC13 + Rotavirus	PENTACEL® DTaP, IPV, Hib + PVC13 + Rotavirus + HepB	HepA, MMR, Varicella, PVC13	PENTACEL® DTaP, IPV, Hib	HepA	Quadracel® DTaP, IPV + MMR + Varicella

EVERY FALL: FLU VACCINE for anyone 6 months and older

Last updated: 05/01/2017

Parental Delegation Form
Authorizing the Immunization of a Minor

I, _____, am the

- ☐ Natural or adoptive
- ☐ Guardian of
- ☐ Person who, under court order, is authorized to give consent for

the minor, _____.
print name of minor

I, hereby, delegate _____
print name of person to whom authority is delegated

to give consent to the immunization of the above named minor. The relationship of this person to the minor is:

- ☐ A grandparent
- ☐ An adult brother or sister
- ☐ An adult aunt or uncle
- ☐ A stepparent
- ☐ Another adult who has care and control of the above named minor

_____ _____
Signature of Parent or Guardian Witness

_____ _____
Date Date

Confirmation Form for Person Other than the Parent Consenting to the Immunization of a Minor

I, _____, am
print name

☐ A grandparent

☐ An adult brother or sister

☐ An adult aunt or uncle

☐ A stepparent

☐ Another adult who has care and control

☐ An adult who has care and control of the minor named below under an order of a court or by commitment by a court to the care of an agency of the state or county and reasonably believe the minor needs immunization

of _____, a minor whose (*check one)* ☐ natural or adoptive parent,
print name of minor
☐ guardian, ☐ person who, under court order, is authorized to give consent for the minor is

_____ and for whom I am giving consent for immunization.
*print name of parent**
.
The following describes the situation of alternate consent:

☐ The parent* has verbally delegated the authority to me to consent for immunization of the above-named minor and I have sufficient information about the minor and the minor's family to enable me to consent.

☐ The parent* is not reasonably available because:

- ☐ the location of the person is unknown.
- ☐ I have made a reasonable effort within the past 90 days to locate and communicate with the parent* for the purpose of obtaining consent and that attempt has failed.
- ☐ I have contacted the parent* and requested that the parent* consent to the immunization and no action has been taken on the request but I have not been expressly denied the authority to consent to the immunization of the above-named minor.

_____ _____
Signature of Person Giving Consent Witness

_____ _____
Date Date

*"Parent" is defined as the natural or adoptive parent, the guardian, or a person who, under court order, is authorized to give consent for the minor.

MARYLAND VFC PROGRAM VACCINE INVENTORY FORM

Fax Pages 1 & 2 To: 410-333-5893

VFC PIN #: (REQUIRED)	Today's Date: (REQUIRED) / /	Phone: (REQUIRED)	Fax:
Name of Physician's Office, Practice, Clinic, Etc.: (REQUIRED)		Contact Person: (REQUIRED)	
Special Delivery Instructions:		Contact Email:	

Vaccine Brand Name (alphabetical order)	NDC #	VFC Vaccine Lot # (REQUIRED)	# of VFC Doses on Hand	Expiration Date (REQUIRED)	*ADDITIONAL VFC Vaccine Lot #*	*# of VFC Doses on Hand*	*ADDITIONAL Expiration Date*
ActHIB *Vials* (Hib)	49281-0545-05						
Adacel *Syringes* (Tdap)	49281-0400-15						
Adacel *Vials* (Tdap)	49281-0400-10						
Boostrix *Syringes* (Tdap)	58160-0842-52						
Boostrix *Vials* (Tdap)	58160-0842-11						
Daptacel *Vials* (DTaP)	49281-0286-10						
Engerix B *Syringes* (Hepatitis B)	58160-0820-52						
Engerix B *Vials* (Hepatitis B)	58160-0820-11						
Gardasil 4 *Vials* (HPV)	00006-4045-41						
Gardasil 9 *Vials* (HPV)	00006-4119-03						
Havrix *Syringes* (Hepatitis A)	58160-0825-52						
Havrix *Vials* (Hepatitis A)	58160-0825-11						
Infanrix *Syringes* (DTaP)	58160-0810-52						
Infanrix *Vials* (DTaP)	58160-0810-11						
IPOL *Vials* (IPV)	49281-0860-10						
Kinrix *Syringes* (DTaP/IPV)	58160-0812-52						
Kinrix *Vials* (DTaP/IPV)	58160-0812-11						

MARYLAND VFC PROGRAM VACCINE INVENTORY FORM Fax Pages 1 & 2 To: 410-333-5893

VFC PIN #: (REQUIRED)	Name of Physician's Office, Practice, Clinic, Etc.: (REQUIRED)	Today's Date: (REQUIRED)
		/ /

Vaccine Brand Name	NDC #	VFC Vaccine Lot # (REQUIRED)	# of VFC Doses on Hand	Expiration Date (REQUIRED)	*ADDITIONAL VFC Vaccine Lot #*	*# of VFC Doses on Hand*	*ADDITIONAL Expiration Date*
Menactra *Vials* **(MCV4)**	**49281-0589-05**						
Menveo *Vials* **(MCV4)**	**46028-0208-01**						
MMR-II *Vials* **(MMR)**	**00006-4681-00**						
Pediarix *Syringes* **(DTAP/Hep B/IPV)**	**58160-0811-52**						
PedvaxHIB *Vials* **(Hib)**	**00006-4897-00**						
Pentacel *Vials* **(DTaP/IPV/Hib)**	**49281-0510-05**						
Pneumo. Conju. *Syringe* **(PCV13)**	**00005-1971-02**						
ProQuad *Vials* **(MMRV)**	**00006-4999-00**						
Recombivax *Syringes* **(Hepatitis B)**	**00006-4981-09**						
Recombivax *Vials* **(Hepatitis B)**	**00006-4981-00**						
Rotarix *Vials* **(Rotavirus)**	**58160-0854-52**						
RotaTeq *Vials* **(Rotavirus)**	**00006-4047-41**						
Vaqta *Syringes* **(Hepatitis A)**	**00006-4831-09**						
Vaqta *Vials* **(Hepatitis A)**	**00006-4831-41**						
Varivax *Vials* **(Varicella)**	**00006-4827-00**						

Helpful tips for completing your VFC Inventory Form:

- **MenB, Td, DT, PPV23, & Hiberix available by written request to 410-333-5893 (fax)**
- **Write "0" next to a vaccine if you do not have any in stock**
- **Include ALL lot numbers, expiration dates, and respective quantities**
- **If you have additional lot numbers, make copies of this form**
- **Do not report expired vaccine on this form; list it on a Vaccine Return Form**
- **Write neatly and clearly**

VFC Contact Center

(410) 274-6240: Baltimore, Baltimore City, Harford, Howard
(410) 299-5647: Frederick, Montgomery, Prince George's
(410) 404-4128: All other counties

Incomplete inventories will NOT be processed.

Log of Children Receiving Vaccines for Children (VFC) Vaccines

(1.) Indicate the child's VFC eligibility: List Medical Assistance Number if applicable. If Child is uninsured, write in "Uninsured". If Child is under-insured (insurer does not pay for cost of vaccines), write in the insurer and policy information. (2.) Check (✓) each vaccine administered. (3.) Total the number of doses.

VFC PIN:
PRACTICE:
DATE RANGE: / / to / /

CHILD'S NAME		DOB	VFC ELIGIBILITY	DTaP	Hep A	Hep B	Hib	HPV	Influenza	Kinrix	MCV 4	MMR	PCV 13	Pediarix	Pentacel	Polio	Proquad	Rotavirus	Tdap	Varicella
1.		/ /																		
2.		/ /																		
3.		/ /																		
4.		/ /																		
5.		/ /																		
6.		/ /																		
7.		/ /																		
8.		/ /																		
9.		/ /																		
10.		/ /																		
11.		/ /																		
12.		/ /																		
13.		/ /																		
14.		/ /																		
VACCINE DOSE TOTALS ➤																				

Maryland Vaccines for Children Program

Fax to: 410-333-5893

STATE OF MARYLAND
DHMH
Maryland Department of Health and Mental Hygiene
201 W. Preston Street, Baltimore, Maryland 21201

Vaccines for Children (VFC) Program
Patient Eligibility Screening Record

***Providers must screen and properly document eligibility status at each immunization visit.**

VFC #: _____

Health Care Provider: _____

Patient: _____ _____ _____ DOB: _____

Date	VFC Eligibility (birth through 18 years of age)					Staff's initials
	Medicaid	Uninsured	Native American/ Alaskan Native	Underinsured (refer to LHD/FQHC)	Not VFC Eligible	

Patient: _____ DOB: _____

Date	VFC Eligibility (birth through 18 years of age)					Staff's initials
	Medicaid	Uninsured	Native American/ Alaskan Native	Underinsured (refer to LHD/FQHC)	Not VFC Eligible	

Center for Immunization

Home
PHPA

Lists

HPTIMELINE

Hot Topics

Ebola
Influenza (Flu)
Vaccines for Children (VFC)
Back to School
Flu Information

Maryland Immunization Registry (ImmuNet)

ImmuNet Home
Login to ImmuNet
ImmuNet Providers
Pharmacists
Schools
FAQ
Contact Us

VFC Contact Center

The Maryland VFC Program is pleased to introduce the VFC Contact Center. The VFC Contact Center will serve as the new central point for addressing your VFC-related questions. The new VFC Contact Center will provide a full range of support for VFC Providers including answering questions related to VFC vaccine supply, vaccine delivery, vaccine allocations and other related issues.

VFC Providers can reach the VFC Contact Center, by telephone, email or fax. Hours of operation will be 8:00 a.m. to 5:00 p.m., Monday through Friday except for holidays.

VFC Contact Center
201 W.Preston Street
Suite 318
Baltimore, MD 21201
Email to: Center for Immunization
410-333-5893 (fax)

To improve customer service and ensure timely responses VFC Providers in each jurisdiction have been assigned a phone number to reach the VFC Contact Center. Please review the list below to find your assigned VFC Contact Center phone number.

410-404-4128	410-299-5647	410-274-6240
Allegany	Frederick	Baltimore City
Anne Arundel	Montgomery	Baltimore County
Calvert	Prince George's	Harford
Caroline		Howard
Carroll		
Cecil		
Charles		
Dorchester		
Garrett		
Kent		

Quick Reference

- Reportable Diseases
- Fact Sheets
- Guidelines

Hot Topics

- Get a Flu Shot

Contact Us

Center for Immunization Email:
DHMH.ZInfo@maryland.gov

Queen Anne's
St.Mary's
Somerset
Talbot
Washington
Wicomico
Worcester

201 W. Preston Street, Baltimore, MD 21201-2399

(410) 767-6500 or 1-877-463-3464

Vaccine Administration Record

Patient Name: _____

Date of Birth: ___/___/___

Parent/Guardian Signature: _____
(Optional)

Provider/Clinic Name & Address:

VACCINE* (Please Circle Appropriate Vaccine)	Date Administered	Vaccine Manufacturer	Vaccine Lot Number	Name and Title of Vaccine Administrator	Date Vaccine Information Statements Given	Publication Date of Vaccine Information Statements
DTaP 1 or DT 1						05/17/07
DTaP 2 or DT 2						05/17/07
DTaP 3 or DT 3						05/17/07
DTaP 4 or DT 4						05/17/07
DTaP 5 or DT 5						05/17/07
IPV 1						07/20/16
IPV 2						07/20/16
IPV 3						07/20/16
IPV 4						07/20/16
Hib 1						04/02/15
Hib 2						04/02/15
Hib 3						04/02/15
Hib 4						04/02/15
PCV 1						11/05/15
PCV 2						11/05/15
PCV 3						11/05/15
PCV 4						11/05/15
PCV 5						11/05/15
MMR 1						04/20/12
MMR 2						04/20/12
Varicella 1						03/13/08
Varicella 2						03/13/08
History of Varicella Disease Date (month/year):						
Hepatitis B 1						07/20/16
Hepatitis B 2						07/20/16
Hepatitis B 3						07/20/16
Influenza 1						Annual
Influenza 2						Annual
Influenza 3						Annual
Tdap						02/24/15
Td						04/11/17
MCV4						03/31/16
MCV4						03/31/16
Hepatitis A 1						07/20/16
Hepatitis A 2						07/20/16
Rotavirus 1						04/15/15
Rotavirus 2						04/15/15
Rotavirus 3						04/15/15

***** - When combination vaccines are given, enter the vaccine information in each separate vaccine row.

Please Note: Vaccine Information Statements dates are subject to change, please check the CDC website for the most current VIS.

MARYLAND VACCINES FOR CHILDREN PROGRAM

Vaccine Return and Wastage Form

VFC PIN: _____ **PRACTICE NAME:** _____

PHONE: _____ **FAX:** _____

COMPLETED BY: _____ **DATE:** _____

EMAIL: _____

Instructions for Completion:

1. **Immediately remove any wasted or expired/spoiled vaccine from the refrigerator or freezer**.
2. Complete this form and fax a copy to the VFC Program at 410-333-5893.
3. Upon receipt, VFC will email a confirmation and the Vaccine Transaction Receipt to be enclosed in the package with the vaccine being returned. DO NOT attempt to return wasted vaccine (opened and unused multi-dose vials, broken vials/syringe, etc). Wasted vaccine should be disposed of according to facility protocol.
4. Upon receipt of the shipping label(s) from McKesson, attach label to the container and give to UPS. Clearly label the outside of the shipping container "Non-viable Vaccine enclosed".

EXPIRED / SPOILED VACCINE ONLY: Vaccine in which the date listed on the vaccine container has elapsed / Vaccine that is no longer viable due to lack of proper storage

Vaccine	Manufacturer	NDC number	Number of Doses	Expiration Date
Reason for return:				

WASTAGE ONLY: Broken vial/syringe; Vaccine drawn up into syringe but not administered; Lost or unaccounted for vaccine; Non-vaccine product (e.g., diluent); Partially used multi-dose vial

Vaccine	Manufacturer	NDC number	Number of Doses	Expiration Date
Reason for wastage:				

By signing below, you agree that you have disposed of the wasted vaccine listed above according to your facility's protocol.

_____ _____

Name (Signed) **Name (Printed)** **Date**

If you have any questions, please call the VFC Contact Center for your jurisdiction.

Temperature Log for Refrigerator – Celsius

DAYS 1–15

Month/Year _____ VFC PIN or other ID # _____

Facility Name _____

Monitor 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 refrigerator'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.

Take action if temp is out of range – too warm (above 8°C) or too cold (below 2°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.

Day of Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Staff Initials															
Exact 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	AM PM	AM PM
Min/Max Temp (since previous reading)															
Danger! Temperatures above 8°C are too warm! Write any out-of-range temps and room temp on the lines below and call your state or local health department immediately!															
TEMPERATURES 8°C															
7°C															
6°C															
Aim for 5° 5°C															
ACCEPTABLE 4°C															
3°C															
2°C															
Danger! Temperatures below 2°C are too cold! Write any out-of-range temps and room temp on the lines below and call your state or local health department immediately!															
ACTION Write any out-of-range temps (above 8°C or below 2°C) here:															
Room Temperature															

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

DISTRIBUTED BY THE
IMMUNIZATION ACTION COALITION Saint Paul, Minnesota • 651-647-9009 • www.immunize.org • www.vaccineinformation.org

Adapted with appreciation from California Department of Public Health
Technical content reviewed by the Centers for Disease Control and Prevention
www.immunize.org/catg.d/p3037C.pdf ▪ Item #P3037C (8/16)

Temperature Log for Refrigerator – Fahrenheit

DAYS 1–15

Month/Year _____ VFC PIN or other ID # _____

Facility Name _____

Monitor 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 refrigerator'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.

Take action if temp is out of range – too warm (above 46°F) or too cold (below 36°F).

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.

Day of Month		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Staff Initials																
Exact 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	AM PM	AM PM
Min/Max Temp (since previous reading)																
Danger! Temperatures above 46°F are too warm! Write any out-of-range temps and room temp on the lines below and call your state or local health department immediately!																
TEMPERATURES	46°F															
	45°F															
	44°F															
	43°F															
	42°F															
	41°F															
Aim for 40°	40°F															
ACCEPTABLE	39°F															
	38°F															
	37°F															
	36°F															
Danger! Temperatures below 36°F are too cold! Write any out-of-range temps and room temp on the lines below and call your state or local health department immediately!																
ACTION	Write any out-of-range temps (above 46°F or below 36°F) here:															
	Room Temperature															

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

Adapted with appreciation from California Department of Public Health

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Technical content reviewed by the Centers for Disease Control and Prevention
www.immunize.org/catg.d/p3037F.pdf • Item #P3037F (8/16)

Temperature Log for Freezer – Celsius

DAYS 1–15

Month/Year _____ VFC PIN or other ID # _____

Facility Name _____

Monitor 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.

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.

Day of Month	1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
Staff Initials																														
Exact 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	AM	PM	AM	PM
Min/Max Temp (since previous reading)																														
Danger! Temperatures above -15°C are too warm! Write any out-of-range temps and room temp on the lines below and call your state or local health department immediately!																														
ACCEPTABLE TEMPERATURES **-15°C**																														
-16°C																														
-17°C																														
-18°C																														
-19°C																														
-20°C																														
-21°C																														
-22°C																														
-50°C to -23°C																														
ACTION Write any out-of-range temps (above -15°C or below -50°C) here.																														
ACTION Room Temperature																														

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

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www.immunize.org/catg.d/p3038C.pdf ▪ Item #P3038C (8/16)

Temperature Log for Freezer – Fahrenheit

DAYS 1–15

Month/Year _____ VFC PIN or other ID # _____

Facility Name _____

Monitor 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.

Take action if temp is out of range—too warm (above 5°F) or too cold (below -58°F).

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.

Day of Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Staff Initials															
Exact 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	AM PM	AM PM
Min/Max Temp (since previous reading)															
Danger! Temperatures above 5°F are too warm! Write any out-of-range temps and room temp on the lines below and call your state or local health department immediately!															
ACCEPTABLE TEMPERATURES 5°F															
4°F															
3°F															
2°F															
1°F															
0°F															
-1°F															
-2°F															
-3°F															
-4°F															
-58°F to -5°F															
ACTION Write any out-of-range temps (above 5°F or below -58°F) here.															
Room Temperature															

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

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www.immunize.org/catg.d/p3038F.pdf ▪ Item #P3038F (8/16)

Temperature Log for Freezer – Fahrenheit

DAYS 16–31

Month/Year _____ VFC PIN or other ID # _____

Facility Name _____

Monitor 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.

Take action if temp is out of range—too warm (above 5°F) or too cold (below -58°F).

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.

Day of Month	16		17		18		19		20		21		22		23		24		25		26		27		28		29		30		31	
Staff Initials																																
Exact 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	AM	PM	AM	PM	AM	PM
Min/Max Temp (since previous reading)																																
Danger! Temperatures above 5°F are too warm! Write any out-of-range temps and room temp on the lines below and call your state or local health department immediately!																																
ACCEPTABLE TEMPERATURES **5°F**																																
4°F																																
3°F																																
2°F																																
1°F																																
0°F																																
-1°F																																
-2°F																																
-3°F																																
-4°F																																
-58°F to -5°F																																
ACTION Write any out-of-range temps (above 5°F or below -58°F) here.																																
Room Temperature																																

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

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www.immunize.org/catg.d/p3038F.pdf ▪ Item #P3038F (8/16)

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

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

Date & Time of Event If multiple, related events occurred, see Description of Event below.	**Storage Unit Temperature** at the time the problem was 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:

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 and last documented reading of storage temperature in acceptable range (36° 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.

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?

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.)

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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 vaccines to temperatures that are outside the manufacturers' recommended storage ranges.
A fillable troubleshooting record (i.e., editable pdf) can also be found at www.immunize.org/clinic/storage-handling.asp

Date & Time of Event If multiple, related events occurred, see Description of Event below.	**Storage Unit Temperature** at the time the problem was discovered		**Room Temperature** at the time the problem was discovered	**Person Completing Report**	
Date: 7/16/2013	Temp when discovered: 55°F		Temp when discovered: 77°F	Name: Nancy Nurse	
Time: 8:00 am	Minimum temp: 2°F	Maximum temp: 57°F	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 (36° 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 55°F. 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 2°F at 5:30 pm (7/15/2013) to 55°F reading discovered when arrived at clinic on Tuesday morning (7/16/2013). Readings hit 6°F at 11 pm (7/15) and 45°F at 2 am (7/16). Total time out of recommended storage temp of 5°F 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 1°F. Also placed "Do Not Use" note on main freezer in lab. Notified Susie Supervisor about the issue. Contacted 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 ~½ 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 0–2°F 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."

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Temperature Log for Freezer – Celsius

DAYS 16–31

Month/Year _____ VFC PIN or other ID # _____

Facility Name _____

Monitor 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.

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.

Day of Month	16		17		18		19		20		21		22		23		24		25		26		27		28		29		30		31	
Staff Initials																																
Exact 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	AM	PM	AM	PM	AM	PM
Min/Max Temp (since previous reading)																																
Danger! Temperatures above -15°C are too warm! Write any out-of-range temps and room temp on the lines below and call your state or local health department immediately!																																
ACCEPTABLE TEMPERATURES **-15°C**																																
-16°C																																
-17°C																																
-18°C																																
-19°C																																
-20°C																																
-21°C																																
-22°C																																
-50°C to -23°C																																
ACTION Write any out-of-range temps (above -15°C or below -50°C) here.																																
ACTION Room Temperature																																

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

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www.immunize.org/catg.d/p3038C.pdf ■ Item #P3038C (8/16)

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

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

Date & Time of Event If multiple, related events occurred, see Description of Event below.	**Storage Unit Temperature** at the time the problem was 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:

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 and last documented reading of storage temperature in acceptable range (36° 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.

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?

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.)

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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 vaccines to temperatures that are outside the manufacturers' recommended storage ranges.
A fillable troubleshooting record (i.e., editable pdf) can also be found at www.immunize.org/clinic/storage-handling.asp

Date & Time of Event If multiple, related events occurred, see Description of Event below.	**Storage Unit Temperature** at the time the problem was discovered		**Room Temperature** at the time the problem was discovered	**Person Completing Report**	
Date: 7/16/2013	Temp when discovered: 13°C		Temp when discovered: 25°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 (36° 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 Susie Supervisor about the issue. Contacted 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 ~½ 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."

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Temperature Log for Refrigerator – Fahrenheit

DAYS 16–31

Month/Year _____ VFC PIN or other ID # _____

Facility Name _____

Monitor 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 refrigerator'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.

Take action if temp is out of range – too warm (above 46°F) or too cold (below 36°F).

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.

Day of Month	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Staff Initials																
Exact 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	AM PM	AM PM	AM PM
Min/Max Temp (since previous reading)																
Danger! Temperatures above 46°F are too warm! Write any out-of-range temps and room temp on the lines below and call your state or local health department immediately!																
TEMPERATURES 46° F																
45° F																
44° F																
43° F																
42° F																
41° F																
Aim for 40° 40° F																
ACCEPTABLE 39° F																
38° F																
37° F																
36° F																
Danger! Temperatures below 36°F are too cold! Write any out-of-range temps and room temp on the lines below and call your state or local health department immediately!																
ACTION Write any out-of-range temps (above 46°F or below 36°F) here:																
Room Temperature																

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

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www.immunize.org/catg.d/p3037F.pdf • Item #P3037F (8/16)

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

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

Date & Time of Event If multiple, related events occurred, see Description of Event below.	**Storage Unit Temperature** at the time the problem was 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:

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 and last documented reading of storage temperature in acceptable range (36° 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.

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?

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.)

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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 vaccines to temperatures that are outside the manufacturers' recommended storage ranges.
A fillable troubleshooting record (i.e., editable pdf) can also be found at www.immunize.org/clinic/storage-handling.asp

Date & Time of Event If multiple, related events occurred, see Description of Event below.	**Storage Unit Temperature** at the time the problem was discovered		**Room Temperature** at the time the problem was discovered	**Person Completing Report**	
Date: (see below)	Temp when discovered: 45°F		Temp when discovered: 77°F	Name: Nancy Nurse	
Time: (see below)	Minimum temp: 38°F	Maximum temp: 53°F	Comment (optional): temp is approx	Title: VFC Coordinator	Date: 6/24/13

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 (36° 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.

At 8 am on Monday (6/24/13) morning when clinic opened, identified 4 temperature excursions over the weekend in refrigerator with readings as high as 54°, 50°, 49° & 53°F in primary vaccine storage unit #1. Recordings taken every 15 min on calibrated digital data logger overnight. Data logger probe in glycol located in middle of refrigerator with vaccines.

Total time out of range: approximately 3 hrs — maximum temp 53°F (see attached document of continuous temp readings)

Inventory of vaccines: see attached

Water bottles in refrigerator door. No vaccine stored in freezer. No problems with storage unit prior to Saturday night. Thunderstorms in area over weekend may have affected power.

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?

Vaccines currently stored appropriately at 40°F. Refrigerator and vaccines labeled "Do Not Use."

My State Immunization Program contacted at 8:30 am. Spoke with Victor Vaccine. Provided Victor with details of event and list of vaccines. Vaccine to remain quarantined until we hear back from Victor.

Called electric company and confirmed 2 short power outages during weekend.

Checked refrigerator seals — called refrigerator maintenance company to replace seals.

Checked plug on unit — placed tape over plug to prevent inadvertent dislodging. Plan to purchase plug guard.

Plan to follow up with Immunization Program on data loggers with alarms that could be sent to coordinator and back-up phones.

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.)

Late on Monday, I talked with Victor regarding continued use of vaccine. Victor had checked with manufacturers which confirmed that vaccine is acceptable for use. He told me that vaccine could therefore be removed from quarantine. I discussed the entire situation with Susie Supervisor and Dr. Director (clinic medical director) who agreed that we could put vaccine back in use.

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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 vaccines to temperatures that are outside the manufacturers' recommended storage ranges.
A fillable troubleshooting record (i.e., editable pdf) can also be found at www.immunize.org/clinic/storage-handling.asp

Date & Time of Event If multiple, related events occurred, see Description of Event below.	**Storage Unit Temperature** at the time the problem was discovered		**Room Temperature** at the time the problem was discovered	**Person Completing Report**	
Date: 7/16/2013	Temp when discovered: 28°F		Temp when discovered: 77°F	Name: Nancy Nurse	
Time: 8:00 am	Minimum temp: 28°F	Maximum temp: 42°F	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 (36° 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 main clinic fridge (in lab) at 8:00 am on Tuesday, 7/16/2013, digital readout on data logger read 28°F. Data logger located in center of fridge with probe in glycol. Review of computer readings (taken every 15 minutes) showed steady drop in temps from 42°F at 8:15 pm (7/15/2013) to 28°F reading discovered when arrived at clinic on Tuesday morning (7/16/2013). Readings hit 34°F at 11 pm (7/15) and 32°F at 2 am (7/16). Total time out of recommended storage temps = 9 hours, with 6 hours at freezing or below (see attached document of continuous temp readings). Inventory of vaccines attached.

Water bottles in refrigerator door and crisper area. No vaccines stored in freezer. No recent adjustments to temp controls and no previous temp excursions noted with this refrigerator 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 fridge (in exam room #3 at 41°F). Also placed "Do Not Use" note on main fridge in lab. Notified Susie Supervisor about the issue. Contacted Victor Vaccine at My State Immunization Program at 8:30 am. Provided Victor with details of event and list of vaccines in fridge. Victor said to maintain vaccines in 2nd fridge and that he would check with manufacturers to determine next steps.

Called Jim's Appliance Repair to examine fridge. Repairman found and replaced faulty thermostat in unit.

Reset data logger on center shelf in fridge with probe in glycol.

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 fridge thermostat repaired, monitored temps in empty fridge for 1 week, per state requirements. Fridge maintained 38°-40°F temps for entire week. Submitted repair documentation and data logger readings to Victor Vaccine for approval and ordered replacement vaccines. Victor had checked with manufacturers who confirmed that all vaccines in fridge EXCEPT MMR were no longer viable and should be returned per state policy guidelines. MMR may be used because pkg insert allows storage down to -58°F. Discussed entire situation with Susie Supervisor and clinic director, Dr. Director, who agreed on continued use of MMR. Will continue to monitor fridge closely to watch for pattern of temp fluctuations indicating potential problem with thermostat. If problems, contact Victor Vaccine for advice on purchasing new fridge meeting criteria for appropriate vaccine storage.

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www.immunize.org/catg.d/p3041.pdf ▪ Item #P3041 (8/16)

Temperature Log for Refrigerator – Celsius

DAYS 16–31

Month/Year _____ VFC PIN or other ID # _____

Facility Name _____

Monitor 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 refrigerator'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.

Take action if temp is out of range – too warm (above 8°C) or too cold (below 2°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.

Day of Month	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Staff Initials																
Exact 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	AM PM	AM PM	AM PM
Min/Max Temp (since previous reading)																
Danger! Temperatures above 8°C are too warm! Write any out-of-range temps and room temp on the lines below and call your state or local health department immediately!																
TEMPERATURES 8°C																
7°C																
6°C																
Aim for 5° 5°C																
ACCEPTABLE 4°C																
3°C																
2°C																
Danger! Temperatures below 2°C are too cold! Write any out-of-range temps and room temp on the lines below and call your state or local health department immediately!																
ACTION Write any out-of-range temps (above 8°C or below 2°C) here:																
Room Temperature																

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

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Adapted with appreciation from California Department of Public Health
Technical content reviewed by the Centers for Disease Control and Prevention
www.immunize.org/catg.d/p3037C.pdf ▪ Item #P3037C (8/16)

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

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

Date & Time of Event If multiple, related events occurred, see Description of Event below.	**Storage Unit Temperature** at the time the problem was 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:

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 and last documented reading of storage temperature in acceptable range (36° 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.

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?

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.)

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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 vaccines to temperatures that are outside the manufacturers' recommended storage ranges.
A fillable troubleshooting record (i.e., editable pdf) can also be found at www.immunize.org/clinic/storage-handling.asp

Date & Time of Event If multiple, related events occurred, see Description of Event below.	**Storage Unit Temperature** at the time the problem was discovered		**Room Temperature** at the time the problem was discovered	**Person Completing Report**	
Date: (see below)	Temp when discovered: 7°C		Temp when discovered: 25°C	Name: Nancy Nurse	
Time: (see below)	Minimum temp: 3°C	Maximum temp: 12°C	Comment (optional): temp is approx	Title: VFC Coordinator	Date: 6/24/13

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 (36° 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.

At 8 am on Monday (6/24/13) morning when clinic opened, identified 3 temperature excursions over the weekend in refrigerator with readings as high as 12°, 10° & 9°C in primary vaccine storage unit #1. Recordings taken every 15 min on calibrated digital data logger overnight. Data logger probe in glycol located in middle of refrigerator with vaccines.

Total time out of range: approximately 3 hrs — maximum temp 12°C (see attached document of continuous temp readings)

Inventory of vaccines: see attached

Water bottles in refrigerator door. No vaccine stored in freezer. No problems with storage unit prior to Saturday night. Thunderstorms in area over weekend may have affected power.

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?

Vaccines currently stored appropriately at 7°C. Refrigerator and vaccines labeled "Do Not Use."

My State Immunization Program contacted at 8:30 am. Spoke with Victor Vaccine. Provided Victor with details of event and list of vaccines. Vaccine to remain quarantined until we hear back from Victor.

Called electric company and confirmed 2 short power outages during weekend.

Checked refrigerator seals — called refrigerator maintenance company to replace seals.

Checked plug on unit — placed tape over plug to prevent inadvertent dislodging. Plan to purchase plug guard.

Plan to follow up with Immunization Program on data loggers with alarms that could be sent to coordinator and back-up phones.

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.)

Late on Monday, I talked with Victor regarding continued use of vaccine. Victor had checked with manufacturers which confirmed that vaccine is acceptble for use. He told me that vaccine could therefore be removed from quarantine. I discussed the entire situation with Susie Supervisor and Dr. Director (clinic medical director) who agreed that we could put vaccine back in use.

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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 vaccines to temperatures that are outside the manufacturers' recommended storage ranges.
A fillable troubleshooting record (i.e., editable pdf) can also be found at www.immunize.org/clinic/storage-handling.asp

Date & Time of Event If multiple, related events occurred, see Description of Event below.	**Storage Unit Temperature** at the time the problem was discovered		**Room Temperature** at the time the problem was discovered	**Person Completing Report**	
Date: 7/16/2013	Temp when discovered: -2°C		Temp when discovered: 25°C	Name: Nancy Nurse	
Time: 8:00 am	Minimum temp: -2°C	Maximum temp: 6°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 (36° 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 main clinic fridge (in lab) at 8:00 am on Tuesday, 7/16/2013, digital readout on data logger read -2°C. Data logger located in center of fridge with probe in glycol. Review of computer readings (taken every 15 minutes) showed steady drop in temps from 6°C at 8:15 pm (7/15/2013) to -2°C reading discovered when arrived at clinic on Tuesday morning (7/16/2013). Readings hit 1°C at 11 pm (7/15) and 0°C at 2 am (7/16). Total time out of recommended storage temps = 9 hours, with 6 hours at freezing or below (see attached document of continuous temp readings). Inventory of vaccines attached.

Water bottles in refrigerator door and crisper area. No vaccines stored in freezer. No recent adjustments to temp controls and no previous temp excursions noted with this refrigerator 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 fridge (in exam room #3 at 5°C). Also placed "Do Not Use" note on main fridge in lab. Notified Susie Supervisor about the issue. Contacted Victor Vaccine at My State Immunization Program at 8:30 am. Provided Victor with details of event and list of vaccines in fridge. Victor said to maintain vaccines in 2nd fridge and that he would check with manufacturers to determine next steps.

Called Jim's Appliance Repair to examine fridge. Repairman found and replaced faulty thermostat in unit.

Reset data logger on center shelf in fridge with probe in glycol.

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 fridge thermostat repaired, monitored temps in empty fridge for 1 week, per state requirements. Fridge maintained 3° to 4°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 manufacturers who confirmed that all vaccines in fridge EXCEPT MMR were no longer viable and should be returned per state policy guidelines. MMR may be used because pkg insert allows storage down to -50°C. Discussed entire situation with Susie Supervisor and clinic director, Dr. Director, who agreed on continued use of MMR. Will continue to monitor fridge closely to watch for pattern of temp fluctuations indicating potential problem with thermostat. If problems, contact Victor Vaccine for advice on purchasing new fridge meeting criteria for appropriate vaccine storage.

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