Storage and Handling Guidance for Merck Varicella Vaccines
(Varicella, Zoster, and MMRV)

How will Varicella-containing vaccines arrive at the office?
Vaccine will be shipped from Merck directly to the practice, usually via UPS. Frozen coolant packs will be utilized and the quantity of coolant packs is based on carefully determined guidelines. Merck has taken into account maximum temperatures the shipping box will be exposed to during transit. There will be no temperature monitor included. Merck frozen vaccine shippers (large box) maintains appropriate storage temperatures for up to 4 days and the smaller box for 2 days. MMRV is a 24 hour ship.

1. When you receive varicella-containing vaccine, immediately place in the permanent freezer unit between -58°F to +5°F (-50°C to -15°C)

What do we do if Varicella-containing vaccines arrive at the office outside of the shipping time?
Merck has packed an adequate amount of frozen coolant packs to maintain temperatures for at least FOUR days for a large shipping box and at least TWO days for the smaller shipping box. Each box will have a shiver insert supplied. This insert explains that a small 2 day box is for orders of 40 doses or less. The large 4 day box is for orders of 40 doses or more. The shiver insert will need to be compared to the shipment date shown on the packing list. If vaccine arrives within appropriate shipping time it is considered safe to use. If shipment arrives outside of the 4 days for the large box or 2 days for the small box or there are questions about condition of vaccine at time of delivery, then call Merck ASAP with specific concerns (include condition of box and time of delivery); follow these steps:
   1. Immediately place varicella-containing vaccine in permanent freezer unit between -58°F to +5°F (-50°C to -15°C)
   2. Place vaccine in clearly labeled paper bag marked “Do Not Use”
   3. Contact Merck call center immediately at 1-800-637-2579 for guidance

What are the transport recommendations for Varicella-containing vaccines?
The recommendation from CDC and Merck is to NOT transport varicella-containing vaccine. If transport is necessary, should use a portable freezer type unit that maintains temperatures -58°F to +5°F (-50°C to -15°C).

How is temperature excursion defined?
A temperature excursion is when temperatures recorded in a permanent or transport storage unit are above or below recommended range. In the case of varicella-containing vaccines the range is -58°F to +5°F (-50°C to -15°C).

How do we transport Varicella-containing vaccines?
1. Document the time vaccine is removed from permanent freezer & time it is placed into portable freezer type unit (preferred transport unit by MDHHS, CDC & Merck)
2. Make sure a thermometer is in transport unit, near the vaccine
3. Monitor and document temperature at beginning & end of transport, if transport will be longer than one hour, monitor and document hourly temperatures
4. At the end of transport, return vaccine to permanent freezer unit at -58°F to +5°F (-50°C to -15°C)
5. If temperatures are maintained at recommended range for varicella-containing vaccine, then further action is NOT needed
Merck does NOT recommend reuse of shipping material (coolant packs, insulated box) to transport varicella-containing vaccines.

What do we do if temperatures are out of recommended range -58°F to +5°F (-50°C to -15°C), at any time?
1. Place vaccine in permanent freezer unit at -58°F to +5°F (-50°C to -15°C)
2. Label “DO NOT USE”, keep vaccine separate
3. Call Merck National Service Center at 1-800-637-2579 to report:
   a. Description of incident, time and temperature at beginning, during and end of transport
   b. Report vaccine type, expiration date and lot number
   c. Inform Merck if this vaccine lot has been previously exposed to temperatures outside of recommended range
4. This Merck phone line is open 7:00 AM to 8:00 PM--if call is placed after hours leave a message and Merck will call back in the morning
5. Merck will give guidance on the use of this vaccine; document findings
6. Contact your local health department regarding any compromised Vaccines for Children (VFC) vaccines

Key Notes:
- If transport occurs in cooler with conditioned water bottles, Merck should be notified to check on vaccine viability—cooler and conditioned water bottles may not get to recommended temperature range
- Conditioned water bottles are frozen water bottles that have been placed in a sink filled with several inches of cool or lukewarm water until you see a layer of water forming near the surface of bottle
- Merck Call Center is 1-800-637-2579 and is for delivery concerns only. Merck National Service Center is 1-800-672-6372 and is for issues when the temperature falls out of recommended range
- Varicella-containing vaccines should be stored frozen at temperatures between -58°F to +5°F (-50°C to -15°C), until it is reconstituted for administration; may be stored at refrigerator temperature (36°F to 46°F, 2°C to 8°C) for up to 72 continuous hours prior to reconstitution; once reconstituted, varicella-containing vaccines must be administered in 30 minutes or discarded.

For more information or updates to this handout: visit Michigan Department of Health and Human Services (MDHHS), Michigan Vaccines for Children Program, at www.michigan.gov/vfc

February 9, 2016
Responding to Situations Where Varicella-Containing Vaccine Requires Transport

- MDHHS, CDC and Merck do NOT recommend transporting varicella-containing vaccines

Varicella-containing vaccine to be transported in a portable freezer (preferred unit by MDHHS, CDC and Merck) where transport will take **less than** one hour

*If transport occurs in cooler with conditioned water bottles*, Merck should be notified to check on vaccine viability—cooler and conditioned water bottles may not get to recommended temperature range

Temperatures in the transport unit and time during transport need to be monitored and documented at the beginning and end of transport

If temperatures are maintained at the recommended range -58°F to +5°F (-50°C to -15°C), then no further action needed

If the temperature is outside of the recommended range of -58°F to +5°F (-50°C to -15°C) at **any time** during transport or if temperature in the transport unit is not documented, additional action is required

1. Place vaccine in permanent freezer unit between -58°F to +5°F (-50°C to -15°C)
2. Label “DO NOT USE”, keep it separate by placing in a clearly labeled paper bag
3. CALL Merck to report; include description of incident, time and temperature at beginning, during and end of transport, report vaccine type, expiration date and lot number. Inform Merck if this vaccine lot has been previously exposed to temperatures outside of recommended range -58°F to +5°F (-50°C to -15°C)
4. Merck National Service Center phone number is 1-800-672-6372. This number is open 7:00 AM to 8:00 PM. If call is placed after hours, leave a message and Merck will call back in the morning.
5. Merck will give guidance on the use of this vaccine. Document what Merck reports.
6. Contact your local health department regarding any compromised Vaccines for Children (VFC) vaccines

*Conditioned water bottles are frozen water bottles that have been placed in a sink filled with several inches of cool or lukewarm water until you see a layer of water forming near the surface of bottle. If ice block inside spins freely when rotated in your hand then the water bottles has been conditioned.

For more information or updates to this handout: visit the MDHHS Michigan Vaccines for Children Program, at [www.michigan.gov/vfc](http://www.michigan.gov/vfc)  

February 1, 2016