The following procedure for packing vaccine will keep all vaccines (except varicella containing vaccine) within recommended temperatures for 12 hours during transport and/or storage at room temperatures. It will also maintain recommended temperatures, if the cooler is temporarily exposed to extreme outdoor temperatures.

If the vaccine will be stored in refrigerators after transport, be sure those refrigerators have maintained temperatures between 2-8°C (35-46°F) for at least 3-5 days.

Assemble Packing Supplies

- **Cooler:** Use hard plastic or Styrofoam coolers. Attach a “Vaccines: Do Not Freeze” label to the cooler.
- **Conditioned cold packs.** Condition frozen gel packs or water bottles by leaving them at room temperature for 1-2 hours until the edges have defrosted. There should be an outer layer of liquid, and should look as if they’ve been “sweating.” Cold packs that are not conditioned can freeze vaccine. **Do not use dry ice.**
- **Thermometer:** Prepare the thermometer by placing it in the refrigerator for at least 2 hours before packing the vaccine.
- **Packing material:** Use two 2-inch layers of bubble wrap. **Not using enough bubble wrap can cause the vaccine to freeze.**

1. **Cold Packs**
   Spread conditioned cold packs to cover only half the bottom of the cooler.

2. **Bubble wrap and Thermometer**
   Completely cover the cold packs with a 2 inch layer of bubble wrap. Then place the thermometer/probe on top of the bubble wrap directly above a coldpack.

3. **Vaccine**
   Stack layers of vaccine boxes on the bubble wrap. Do not let the boxes of vaccine touch the cold packs.

4. **Bubble Wrap**
   Completely cover the vaccine with another 2-inch layer of bubble wrap.

5. **Cold Packs**
   Spread “conditioned” cold packs to cover only half of the bubble wrap. Make sure that the cold packs do not directly touch the boxes of vaccine.

6. **Form and display**
   Fill the cooler to the top with bubble wrap. Place the thermometer’s digital display on top.

As soon as you reach the destination site, check the vaccine temperature. If the vaccine is:

- Between 2-8°C (35-46°F), unpack and put in refrigerator.
- Below 2°C (35°F) or above 8°C (46°F), label the vaccine “Do Not Use” and put in refrigerator. Follow the guidelines set forth for determining vaccine viability, and/or contact a VVFC representative for further assistance at 800-568-1929.