



CLINICAL RESOURCE: MAKE SURE TO RECONSTITUTE WITH THE CORRECT DILUENT

Some vaccines require reconstitution with diluent prior to administration. As per the [Canadian Immunization Guide](#) and manufacturers instructions, vaccines are only to be reconstituted with the diluent provided by the manufacturer for that specific vaccine. Diluents are prepared by the manufacturer specifically for each vaccine and the quantity of diluent is exactly matched to the required volume to arrive at the proper concentration of the vaccine product after reconstitution.

Manufacturer	MMR	MMRV	Var	Diluent	Product
GSK	Priorix®	Priorix-Tetra®	Varilrix®	0.5ml sterile water in ampoule	
Merck	M-M-R®II	ProQuad®	Varivax®	0.7ml sterile water in vial	

Although both Merck and GSK diluents are sterile water, they contain different amounts. Merck vials are 0.7ml and GSK ampoules are 0.5ml. **They are not interchangeable.**

Using the incorrect diluent when reconstituting a vaccine may result in the vaccine being too dilute or too potent, which may alter the effectiveness of the vaccine administered.

When public health distributes vaccines that require diluent, the vaccine and diluent are distributed in a 1:1 ratio. If at any time you identify there is more of one than the other in your fridge, investigate the possible cause of the discrepancy. In some cases, this may indicate that a medication error has occurred.

Tips to Prevent Using the Wrong Diluent

- Make sure you keep the vaccine and corresponding diluent together in the fridge. We recommend using an elastic band to secure the boxes together.
- Double check the manufacturer name on the vaccine box and diluent box match before you reconstitute.
- Return diluent with any wasted or expired vaccine to ensure you have only what's necessary.