

POLICY STATEMENT(S):

The Board of the College of Pharmacists of BC adopts the BCCDC guidelines on the Cold Chain Management of Biologicals. Refer to BCCDC's Communicable Disease Control Immunization Program: Section VI – Management of Biologicals.

[http://www.bccdc.ca/resource-gallery/Documents/Guidelines and Forms/Guidelines and Manuals/Epid/CD Manual/Chapter 2 - Imms/Appendix E ManagementBiologicals.pdf](http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%20-%20Imms/Appendix%20E%20ManagementBiologicals.pdf)

BACKGROUND:

“Cold chain” refers to the process used to maintain optimal temperature conditions during the transport, storage and handling of vaccines and other refrigerated pharmaceuticals, starting at the manufacturer and ending with the administration of the product to the client.

Vaccines are sensitive biological products; protection of vaccine potency and stability is important.

The recommended temperature for vaccine storage is, at all times, +2°C to +8°C.

Biologicals may be inactivated by exposure to excess light or heat or freezing, depending on the nature of the product, the temperature reached and the duration of exposure. Freezing will reduce the potency of inactivated vaccines and exposure to heat and light can compromise the stability of live-virus vaccines. **Any loss of vaccine potency is permanent and irreversible. Damage from successive exposures to adverse conditions is cumulative.** It is important to know the correct storage conditions for each biological product and to ensure that each is kept under the recommended conditions.

When the temperature is in the 0°C to 2°C range, adjust the refrigerator temperature and restore the temperature to within the +2°C to +8°C range **immediately**.

All biological products freeze at temperatures below 0°C; products that have been exposed to temperatures below 0°C should not be used. Consult with BCCDC Vaccine and Pharmacy Services, as there may be specific exceptions to this (e.g., lyophilized products.)

Committee endorsement:

The B.C. Centre for Disease Control guidelines were endorsed by the following College committees: Community Pharmacy Practice Committee, Residential Care Committee and the Hospital Pharmacy Committee.