

Maintain the Cold Chain – Part 1



A learning module for those who transport and handle vaccines

Reviewed and updated August 2019



Thunder Bay District
Health Unit

PART 1

Part 1 includes:

- Introduction
- Section 1 – Test Your Knowledge



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Introduction



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Introduction

- This learning module was developed using the *Vaccine Storage and Handling Guidelines (2012)*. The module was last reviewed in August, 2019.
- It is intended for staff who transport and/or handle vaccines in health care provider offices, hospitals or long- term care facilities.
- After completing the module, learners will be able to:
 - Define the cold chain and explain why it's important to maintain.
 - List the steps involved in maintaining the cold chain.
 - Recognize a cold chain incident and list the actions needed should one occur in their workplace.



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Section 1

Test Your Knowledge



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Test Your Knowledge

Question 1: Universal immunization is one of the most cost-effective ways to prevent disease.

- True
- False

Question 2: The cold chain refers to:

- a. All of the materials, equipment, and procedures used to keep vaccines at the proper storage temperature.
- b. The temperature logs used to monitor vaccine temperatures.
- c. The chain used in a refrigerator motor that keeps vaccine storage temperatures stable.



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Test Your Knowledge

Question 3: How many times a day should you record your current, minimum and maximum temperatures in your temperature log book:

- a. Once a week using a digital thermometer.
- b. Twice a day using any type of thermometer, as long as it's the same one each time.
- c. Once a month or whenever someone gets around to it.
- d. Twice a day using a digital thermometer that records current, minimum and maximum temperatures.

Question 4: Most vaccines should be stored between:

- a. 3°C and 10°C
- b. 1°C and 6°C
- c. 2°C and 8°C
- d. 0°C and 4°C



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Test Your Knowledge

Question 5: Vaccines must be transported in a monitored, insulated hard sided cooler in order to keep them at the proper storage temperature.

- True
- False

Question 6: When picking up your vaccines at the Health Unit, they will only be dispensed to you if the temperature inside your cooler is between 2-8°C.

- True
- False



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Test Your Knowledge

Question 7: Once vaccines are exposed to temperatures outside of the 2-8°C range, the Health Unit should be contacted right away.

- True
- False

Question 8: Ice build-up in the freezer of the fridge doesn't cause fluctuations in temperatures.

- True
- False

Test Your Knowledge

Question 9: Once opened, multi-dose vials are stable for a specified period of time after the first dose is drawn. This information can be found in the product monograph.

- True
- False

How did you do?

- Question 1 = True
- Question 2 = a
- Question 3 = d
- Question 4 = c
- Question 5 = True
- Question 6 = True
- Question 7 = True
- Question 8 = False
- Question 9 = True

According to the Canadian Public Health Association (CPHA), infectious diseases were the leading cause of death worldwide one hundred years ago. Today, the situation is much different.

Thanks to immunization programs, infectious diseases now cause less than 5% of all deaths. Immunization has probably saved more lives in Canada in the last 50 years than any other health intervention.



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Next Steps...

- Return to the Health Unit's website to review Part 2 by clicking the back button found on the left side of the web browser at the top of the page.
- Continue through Parts 2, 3, 4 and 5. Then, complete a final quiz (Section 8).
- Submit the quiz to receive a certificate of completion.