

# Passive Cold Chain (Shipping/storage materials)

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## ➤ Monitoring means

- In order to monitor temperature effectively, the Logistician should adopt the following:
- Twice daily temperature sheet: sheet on which the temperature is indicated morning and evening, every day of the month. There is one sheet per month and one sheet per piece of equipment. Any maintenance work done is also indicated.
- Monitoring card: generally referred to as the 3M card, it is used to monitor temperature variations during storage and shipping from the manufacturer to the user.
- Irreversible freezing indicator (at 0°C): this indicator is placed near products that should not be frozen.
- Stop Watch card: this is the 3M card with the freezing indicator. It is placed in the refrigerator and is used to monitor temperature variations and determine if the equipment is functioning properly.

## List of Selected Cold Chain Monitoring Indicators:

- Number of days in a given period the temperature was recorded correctly: twice daily on the temperature chart
- Number of days the temperature was outside the recommended range
- Number of days the refrigerators were broken down: due to lack of generator power (fuel /energy, spare parts, skilled technician)
- Time lag before corrective measures were taken
- Amount of Oral Polio Vaccine (OPV) discarded after Vaccine Vial Monitor (VVM) reached discard point
- Amount of frozen freeze-sensitive vaccines (e.g. DPT, Hep B)
- Amount of vaccines discarded due to reaching their expiry date
- The total cost of discarded vaccines due to above reasons
- Cold chain operational plan in place and in use
- Cold chain maintenance plan in place and in use
- Cold chain emergency plan in place
- Cold chain equipment inventory available and consistent with their physical presence
- Regular reporting on cold chain in place
- National cold chain officer trained/re-trained during the last 3 years
- Staff assigned to cold chain at health facility level trained in cold chain basics: Number of assigned staff to cold chain; Number trained