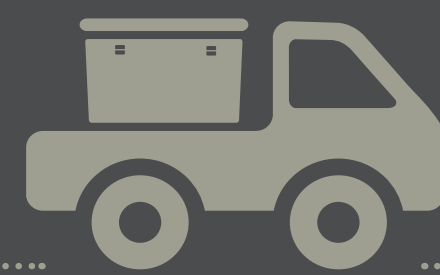


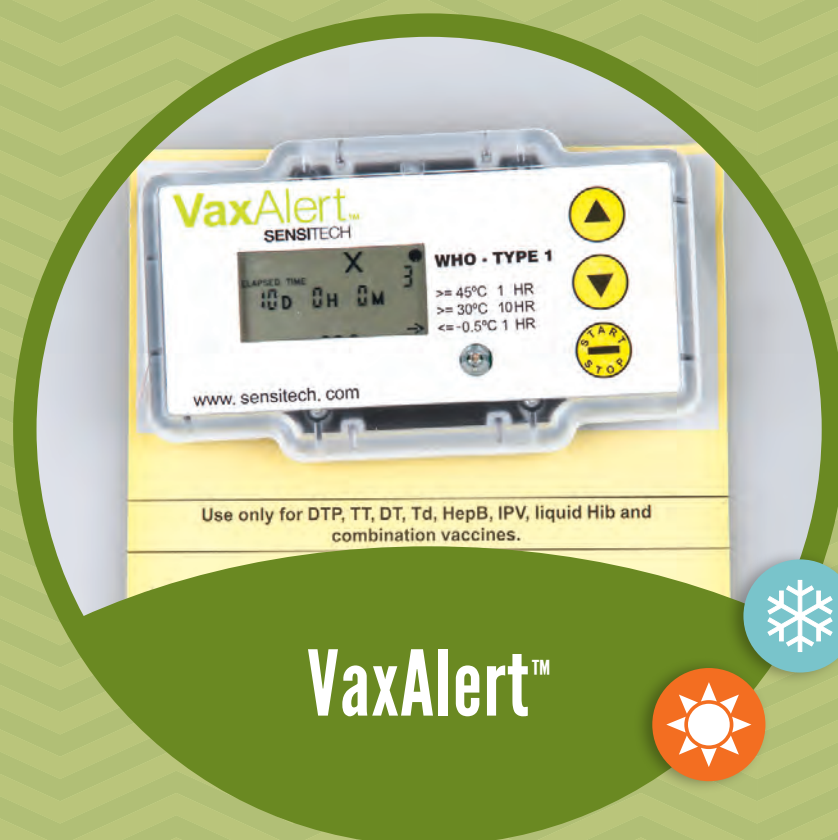


INTERNATIONAL SHIPPING



20-DAY ELECTRONIC SHIPPING INDICATORS (IRREVERSIBLE)

Single use; once the alarm has been activated, the device cannot be used again.



VaxAlert™



LogTag TIC20

Monitors temperature during shipment of vaccine. Alarm is activated if temperature exceeds or falls below recommended range.



Q-tag CLm doc



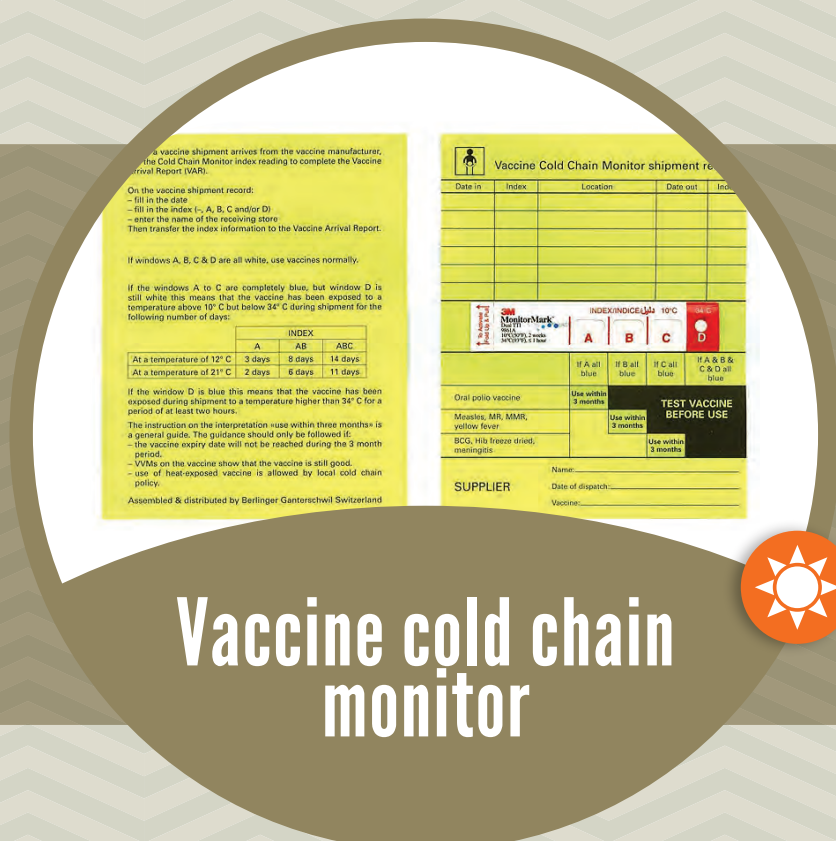
Q-tag2 plus



Q-tag CLm

COLD CHAIN MONITOR CARDS (IRREVERSIBLE)

Single use; once the alarm has been activated, the device cannot be used again. Recommended only for international shipments with dry ice.



Vaccine cold chain monitor

Monitors temperature during shipment of frozen vaccine.

CHEMICAL TEMPERATURE INDICATORS (IRREVERSIBLE)



HEATmarker Vaccine vial monitor (VVM)

Assesses heat exposure of individual vaccine vials or other primary containers of vaccine (used throughout the supply chain).

MAKING SENSE OF TEMPERATURE MONITORING DEVICES

WHO PQS QUALIFIED PRODUCTS

These devices are prequalified for the Expanded Programme on Immunization by the World Health Organization Performance, Quality and Safety (PQS) programme of the Department of Immunization, Vaccines and Biologicals-Quality, Standards and Safety as of July 2013.

KEY:

WARNS AGAINST:

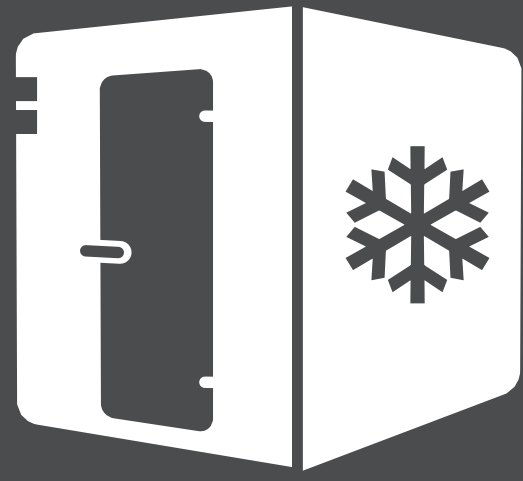


Freeze

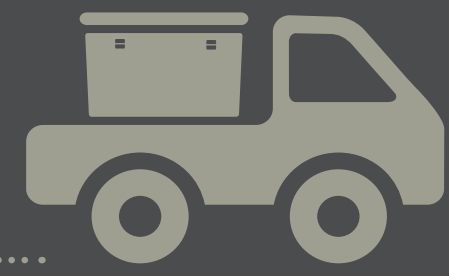


Heat

Unless otherwise indicated, all photos: PATH/Patrick McKern.



COLD ROOMS AND/OR FREEZER ROOMS



DIAL THERMOMETERS (gas/vapor pressure)



Rueger
TFV100BI

Photo: World Health Organization

Monitors current temperature; may be used as a backup external temperature display in case of power failures.

INTEGRATED DIGITAL OR DIAL TEMPERATURE MONITORS



Included on all PQS prequalified cold rooms, freezer rooms, refrigerators, and freezers.

Photo: PATH / Amy MacIver

REMOTE TEMPERATURE MONITORING SYSTEMS



SmartView

Photo: PATH and Berlinger & Co.



Beyond Wireless
Fridgfone™

Photo: PATH

Monitors temperatures and sends recorded data and alarms to a central server or cellular phone at set intervals.

FREEZE INDICATORS (IRREVERSIBLE)

Single use; once the alarm has been activated, the device cannot be used again. Not used in freezers.



Freeze-tag®



FreezeAlert™



Q-tag® Quad

SUPPLY CHAIN STUDIES

USER-PROGRAMMABLE TEMPERATURE DATA LOGGERS



Libero CB
PDF Logger®



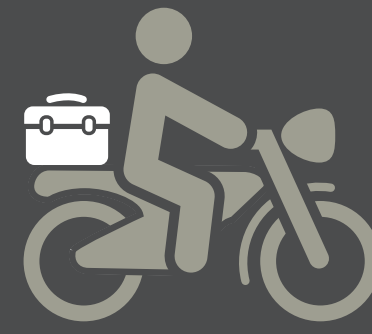
Libero CS
PDF Logger®



Libero Ti1
PDF Logger®



REFRIGERATORS AND FREEZERS



COLD BOXES AND VACCINE CARRIERS

Monitors current temperature and displays temperature externally.

30-DAY ELECTRONIC TEMPERATURE RECORDERS



LogTag®
TRID30-7FW

Records temperatures at regular intervals. Provides alarms if temperatures fall out of range. Used to determine if equipment is functioning correctly. Can also be used to map cold/freezer rooms.



Fridge-tag®



Fridge-tag 2®

20-DAY ELECTRONIC SHIPPING INDICATORS

Can be used in cold boxes and vaccine carriers to detect temperature excursions.

Detects freeze incidents. May be used as a backup indicator for potential freeze exposure in cold rooms.



Peak temperature
indicators
Currently no WHO prequalified
products available

Used for transporting vaccines licensed for use in a controlled temperature chain vaccine to detect temperature exposures above 40°C.



LogTag®
PTED30-7F



LogTag®
PTID30-7F



LogTag® TRIX-8

Records temperatures at user-specified intervals; used for supply chain studies and temperature profiles.