Recommendations for Condom Storage and Shipping Temperatures

During Shipment:
Store condoms in dry conditions away from direct sources of heat and sunlight. Average temperature during shipment should not exceed 30 °C. Peak temperatures should not exceed 50 °C.

Warehouse Storage:
Store in well ventilated, dry conditions away from direct sources of heat including sunlight. Long-term average storage temperature to be less than 30 °C. Short-term temperature excursions should not exceed 40 °C.

Condom factories prequalified by UNFPA will have provided evidence to verify the claimed shelf-life of the product. The shelf-life is determined by a real-time study, conducted at a specific temperature (30 +5/-2 °C), because this is the mean kinetic temperature of the most extreme climate in climatic zones III and IV. Research has demonstrated that properly packaged good-quality condoms stored at average temperatures in tropical climates do not deteriorate during storage. More information about the recommendations for storage and shipment, and the rationale for choosing 30 +5/-2 °C as the storage temperature for stability studies is given in the Technical Basis Paper of the WHO/UNFPA Technical Specification for Male Latex Condoms.

Since the shelf-life of the condoms will have been determined at 30 +5/-2 °C, air-conditioned storage is not necessary, but it would be an advantage in hot climates if available. In hot climates it is important that condoms are stored in a well-ventilated environment away from direct sunlight and other sources of heat in order to minimize the exposure of the condoms to high temperatures. Similar precautions should be taken during transportation and delivery. In general, the storage temperature should be as low as can practically be achieved. Condoms stored outdoors in shipping containers are particularly vulnerable, as the temperatures inside containers can be substantially above ambient temperatures, resulting in faster deterioration.

Storage time in containers should be minimized. The condoms are sealed in individual foil packages, which are themselves packed in cardboard. The cardboard storage containers are vulnerable to moisture and should be stored in a dry storeroom away from walls and placed on pallets to protect against rising damp. Ideally, cartons should be stored at least 10 cm off the floor, 30 cm away from the walls and stacked no more than 2.4 metres high.

Condoms are fully protected by the individual foil package. However, cosmetic damage to the foil and damage to the outer packaging can make the product appear damaged and therefore less acceptable to the user. Contaminants of any sort (e.g. powders or liquids) should be avoided.

Condoms should be left in their original cartons and inner boxes until needed for distribution. The cartons should be positioned so that the lot number and expiry date are visible. The cartons should be identified and their locations recorded to ensure that specific lots can be located. Lots should be released on a first expiry—first out basis (FEFO).

Damaged or expired condoms should be kept separately and clearly segregated. Disposal of such condoms should be in accordance with local procedures for the disposal of damaged medical devices.