

Expiry Dates of Medicines - Good Practice Guidance for Care Homes

Medication expiry dates definition

The expiry date of a medicine is the point in time when a pharmaceutical product is no longer within an acceptable condition to be considered effective for a patient or has the potential to do harm and the medication reaches the end of its useable 'shelf life'. This is not to be confused with a "best before date" for perishable foods where they can be eaten after the best before date if they still look palatable.

Depending on the product, the expiry date may be set as a fixed time e.g. after manufacture, after dispensing or even after opening of the manufacturer's original container. Below is a table defining what the expiry dates are for various manufacturer descriptions:

Wording on manufacturers packaging	Expiry date
Best before January 2021	Discard 31/12/2020
Use before end January 2021	Discard 31/01/2021
Use by January 2021	Discard 31/12/2020
Discard after January 2021	Discard 31/01/2021
Expires January 2021	Discard 31/01/2021
Use within one month of opening	Write date opened on the container and date expires
Discard 7 days after opening	Write date opened on the container and date expires

Certain external factors can affect the expiry of a product e.g. contact with water, changes in temperature, exposure to air or light. Generally solid dose formulations have a longer expiry date than liquid preparations.

The shelf life of a product is determined by either how quickly the breakdown of the active drug occurs or due to the risk of contamination from bacteria or other microbes. Not all drugs deteriorate at the same rate and so expiry dates can vary from product to product. Correct storage is crucial for maintaining the useable shelf life of a medicine

Key points for general storage guidelines

- Store as recommended by manufacturer.
- Keep all medication in the original container in which they were dispensed
- Keep medicines in their original outer packaging, to protect from sunlight
- All medicines should be stored in a cool (below 25°C) dry place unless refrigeration is required (between 2° and 8°C)
- The expiry date of some products can change once opened.
- Record the date opened and the calculated expiry on the medicine package/label.
- Be vigilant with product expiry dates and ensure these are checked regularly, particularly for opened products.

Expiry after opening

The manufacturer's expiry on a container is the unopened expiry date. Certain preparations e.g. all eye drops and some oral liquids have a shorter shelf life once they have been opened. This should be highlighted on the medicine label or container. Your community pharmacy may be able to supply you with some 'date opened' labels.

The following product list is not exhaustive and is only intended to cover some of the most frequently used products. Please add to this or compile your own list for medicines used by your patients. See also table of general suggested expiry of products after opening on the following page.

Medicine	Shelf life once opened
Nicorandil (each opened blister strip)	30 days
Oramorph 10mg/5ml Liquid	90 days
Oramorph concentrated 20mg/ml Liquid	4 months
Persantin Retard Capsules (dipyridamole MR)	6 weeks
Risperdal 1mg/ml Liquid	3 months
Asasantin Retard Capsules (aspirin and dipyridamole MR)	6 weeks
Chlorpromazine Syrup 25mg/5ml & 100mg/5ml (Rosemont)	6 months

Consequences of using expired stock

- The active drug becomes chemically unstable
- The effectiveness of the drug may change
- The breakdown of the drug may be toxic and harmful to the patient
- Increased risk of contamination from bacteria and other microbes

Any product whose appearance suggests it may be unfit for use should be discarded, irrespective of expiry date. If any doubt, contact your community pharmacy for advice.

Resources / References

- Continuing Professional Pharmacy Education (CPPE) Supporting Care Homes in Medicines Management April 2007.
- Pharmaceutical Journal – How stable are medicines moved from original packs into compliance aids January 2006 Vol 276
- Royal Pharmaceutical Society GB Handling Medicines in Social Care
- Guidance for Expiry Dates for Medicines in Use in Care Homes -Coventry and Warwickshire APC RD 006


Acknowledgements

This guidance was adapted from Sheffield CCG "Good Practice Guidance for Care Homes – Expiry Dates" prepared by the Worker Group of the Medicines Management Task Group, SCHBPG

Table of General Suggested Expiry of Products from Date of Opening

NB: Due to the lack of available robust evidence on generic expiry dates for medicines once opened the following general expiry dates are suggested unless the manufacturer states otherwise and provided the product is still within its unopened expiry date.

Formulation and packaging	Suggested expiry after Opening (unless specified by manufacturer)	Rationale / Comments
Tablets/ capsules in monitored dosage systems (MDS)	8 weeks from the date of dispensing	Limited stability data when packaged into MDS packs.
Tablets/ capsules/ liquids decanted into pharmacy bottle	Seek community pharmacy Advice on expiry	Dependent on stability of product.
Part pack of tablets/ capsules remaining in manufacturer's blister pack dispensed in pharmacy box/ dispensed in original pack	Manufacturer's expiry on blister. If no expiry visible contact community pharmacy for advice	Closed container, contents not openly exposed to environment. If no visible expiry there is risk that product may have expired.
Tubs of creams/ ointment decanted from bulk container	1 month or Seek community pharmacy advice	Decanting from bulk container into another container could introduce contamination.
Tubs of cream specially made for individual	Seek community pharmacy advice	Dependent on stability of product.
Tubes of creams/ ointments	3 months	Closed container, contents not openly exposed to environment.
Pump or flexi dispenser packs of creams / ointment	Manufacturer's expiry refer to expiry symbol	Closed container, contents not openly exposed to environment.
Tubs of creams / ointments	1 month	The contents are exposed and can become contaminated.
Oral liquids in original container	6 months unless otherwise specified by manufacturer	Exposure of liquid to environment when dose is measured can introduce contamination
Eye, Ear, Nose drops/ ointments	1 month (unless otherwise stated)	Manufacturer's recommendation
Inhalers	Manufacturer's expiry / refer to dose counter if available	Closed container, contents not openly exposed to environment
Insulin – ONCE OPENED	4 weeks for insulin vials and pens unless otherwise stated. When in use can be kept at room temperature (i.e. less than 25°C)	The sterile seal has been broken and may be stored outside the fridge

Some products now show an expiry symbol e.g. . However, in the care home setting where storage conditions may be variable it is recommended that the above suggested expiry dates are followed.

Any product whose appearance suggests it may be unfit for use should be discarded, irrespective of expiry date. If there is any doubt contact community pharmacy for advice.

