

Good Practice Guidance on Expiry Dates of Medicines

This guidance has been compiled primarily for Care/Nursing homes but also contains good practice guidance for prescriber’s and community pharmacy

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 2016 | Discard 31/12/2015 |
| Use before end January 2016 | Discard 31/01/2016 |
| Use by January 2016 | Discard 31/12/2015 |
| Discard after January 2016 | Discard 31/01/2016 |
| Expires January 2016 | Discard 31/01/2016 |
| Use within one month of opening | <i>Self explanatory</i> |
| Discard 7 days after opening | <i>Self explanatory</i> |

Certain external factors can affect the expiry of a product e.g. contact with water, changes in temperature, exposure to air or light. Generally speaking, 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 and

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°C 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 |
|---|-------------------------------|
| Tear Lac / Hylo Tear / Hylo Forte eye drops | 6 months |
| Vita-Pos eye ointment | 6 months |
| Optive / Systane eye drops | 6 months |
| 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 |
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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.

NHS Rotherham CCG good practice guidance for Care and Nursing homes on expiry dates of medicines
Ratified 26th October 2016; review November 2018; Author: Jason Punyer, Prescribing Advisor

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 | As above, and 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

Good Practice guidance for Care/Nursing Home Staff

Ordering medication

- A nominated member of staff to be responsible for ordering with named deputy.
- Check quantities ordered are appropriate for the patient's requirement in order to avoid medication waste.
- Don't forget to check medication not routinely stored in the medicines trolley.
- Before placing the monthly order:
 - ✓ **check the current stock levels of medication**, especially items which are not supplied in individually packed monitored dosage systems
 - ✓ **report excess quantities returned regularly** - ask the GP to review if it is still needed, or to prescribe smaller quantities

Receiving medication from pharmacy

- Check if there are any specific expiry date instructions e.g. some liquid antibiotics.
- Check the medication is still within its manufacturer's expiry date.

Storing medication

- Note and act on any specific storage instruction e.g. store in the fridge.
- Rotate stock so the earliest expiry is at the front and therefore going to be used first.
- Check expiry dates of stock monthly.
- Medication is to remain in the container in which it was received – batches must not be mixed.

Administering medication

- Check expiry date before administration
- Record the date opened and the calculated expiry on the medicine package/label where appropriate e.g. creams, eye drops. Some packaging does not allow for the pharmacy label to be placed on the product e.g. eye drops. In these instances the outer packaging will have to be marked with the date of opening. It is essential that the product remains in the outer packaging throughout duration of this treatment.
- Highlight any short expiry e.g. recording in care notes or on Medication administration records as a reminder to all staff
- Check the medicine before administration for any signs that suggest it may be unfit for use and discard irrespective of expiry date. If in doubt contact the community pharmacy for advice.

Good Practice guidance for Prescriber / GP Admin Staff

Issuing / authorising prescriptions

- Check quantities ordered are appropriate for the patient's requirement in order to avoid medication waste.
- Query quantities ordered which appear to be excessive
- Challenge medication requested that should not be ordered regularly every month e.g. PRN medication or GTN spray ordered the previous month.

Medication review

- Review medication no longer needed and remove from repeats
- Review quantities of medication, particularly PRN medication and change to a suitable level required for one month's supply.

Repeat prescribing process

- Consider nominating a named practice member to process care home prescription requests and to act as contact known to the care home to deal with queries.

Good Practice guidance for Community Pharmacy

Ordering medication on behalf of Care/Nursing homes

- Check quantities ordered are appropriate for the patient's requirement in order to avoid medication waste.

Dispensing medication

- If decanting from bulk container, label with appropriate expiry date
- Shortened expiry dates to be highlighted
- Do not obscure expiry date with label
- If care home generally receives medicines in MDS, inform staff if a particular medicine is unsuitable for inclusion due to problems with stability. The foil packing around individual tablets must not be cut and placed in MDS, doing so has potential to cause harm if inadvertently swallowed by service user

Monitored Dosage Systems (MDS)

It is recommended that medicines dispensed in a MDS are discarded after 8 weeks from the date of dispensing. Please note not all medicines are suitable for inclusion in MDS and the dispensing community pharmacist is responsible for determining which medicines are suitable for inclusion in MDS devices but the following general principles apply:

- Medicines that may be harmful when handled, e.g. cytotoxic products like methotrexate
- Medicines that are sensitive to moisture, e.g. effervescent tablets, nicorandil
- Light-sensitive medicines, e.g. chlorpromazine
- Medicines that should only be dispensed in glass bottles, e.g. glyceryl trinitrate tablets (GTN)
- Medicines that should only be taken when required, e.g. painkillers
- Medicines whose dose may vary depending on test results, e.g. warfarin

When required (PRN) medicines;

- should be dispensed in their original packs whenever possible, to give the longest shelf life and prevent medicines from being wasted.
- in their original containers can be carried forward each month provided they remain in date
- should be stock-rotated to ensure that the oldest medicines are used first
- must NOT be returned and re-ordered each month, as this is unnecessary and wasteful.

NB Be aware of the expiry date of PRNs especially if they are not used frequently

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