

🔙 FDA recalls

- ✔ **Class I:** Recalls for products that could cause severe injury or death
- ✔ **Class II:** Recalls for products that might cause significant injury or temporary illness
- ✔ **Class III:** Recalls for products that are unlikely to cause injury or illness but violate FDA regulations

🗑️ Color coding for waste disposal

Color Coding	Use
Red	Disposal of blood and blood products, body fluids, sharps, PPE that has come into contact with blood, body fluids, or infectious material.
Yellow	Disposal of chemotherapy waste, including tubes, IV bags, and sharps used for chemotherapy
Blue and White	Any pills, injectables, and antibiotics (only non-hazardous waste)
Black	Hazardous pharmaceuticals, radioactive waste

❄️ Common medications that need refrigeration

Medications that require refrigeration include:

- ✔ Insulins
- ✔ Reconstituted antibiotic suspensions like amoxicillin
- ✔ Certain eye drops like latanoprost
- ✔ Chloramphenicol ear drops
- ✔ Vaccines
- ✔ Interferons (Pegasys)
- ✔ Filgrastim (Neupogen) injections
- ✔ Miacalcin nasal spray
- ✔ Lorazepam and gabapentin oral drops
- ✔ Adalimumab (Humira)
- ✔ EPOGEN (epoetin)
- ✔ Enbrel (etanercept)
- ✔ Sandostatin (octreotide)
- ✔ Capsules and tablets of ritonavir
- ✔ Chlorambucil (Leukeran)
- ✔ Melphalan (Alkeran)
- ✔ Etoposide (VePesid)
- ✔ Cervical gels like Prepidil containing dinoprostone
- ✔ Specialty type 2 diabetes injections like Byetta that contains exenatide
- ✔ Victoza that contains liraglutide
- ✔ Semaglutide containing medications like Ozempic and Wegovy need to be refrigerated at 36–46°F before first use

💊 Drug stability and insulin

Insulin is stored in a refrigerator at approximately 36°F to 46°F. Insulin products contained in vials or cartridges supplied by the manufacturers (opened or unopened) may be left unrefrigerated at a temperature between 59°F and 86°F for up to 28 days and continue to work.

🏠 Vaccine storage

Vaccines licensed for refrigerator storage should be stored at 2°C–8°C (36°F–46°F). Certain lyophilized (freeze-dried) vaccines like varicella (chicken pox) are stored frozen.

🕒 Comparing expiration date with shelf life of a drug

Expiration date

Date till which the manufacturer guarantees the drug's potency and safety. Ideally, drugs should not be used after the expiration date. Some drugs may still maintain potency for a while after the expiration date. Some drugs degrade to toxic products after the expiration date.

Shelf life

Refers to the quality of a drug. Although they are not toxic, they may not be effective if taken after their shelf life. It is affected by storage conditions like heat, light, and moisture.