

Patient Education Sheet

Insulin: Proper Storage and Handling

Why is proper storage and handling of insulin important?

Insulin is a medication that is sensitive to temperature. Storing insulin at too low or too high a temperature will decrease its potency or strength. A decrease in the strength of insulin will result in poor blood glucose control.

How should insulin be stored?

Unopened vials, pens or cartridges of insulin should be stored in the refrigerator. The inside of the refrigerator door closest to the door handle is a good area for storing insulin. Avoid cold spots where insulin might freeze.

After the first use or puncture of the insulin bottle or vial, most insulin may be refrigerated or stored at room temperature (59°F to 86°F) Insulin should not be exposed to high temperatures (more than 86°F or prolonged direct sunlight.

How long can insulin be used?

Unopened refrigerated insulin vials, pens and cartridges may be used until the expiration date printed on the label by the manufacturer.

In-use vials of insulin, whether refrigerated or at room temperature, should be discarded after 28 days.

In-use insulin pens and cartridges should be stored at room temperature and should be used within the following time periods:

Pens And Cartridges	Maximum Storage Time
• Insulin suspensions (NPH)	14 days
• Rapid acting insulin (Humalog, Novolog, Apidra):	28 days
• Mixtures of insulin (70/30, 75/25, 50/50)	10 days

Additional Recommendations

Before using insulin, always do the following:

- Check the expiration date; do not use expired insulin.
- Inspect the appearance of the insulin. It should look as follows:

Rapid Acting: Humalog, Novolog, Apidra	Clear, like water
Long-acting/basal: Lantus, Levemir	Clear, like water
Insulin suspensions: NPH	Uniformly cloudy after gentle mixing
Insulin mixtures: 70/30, 75/25, 50/50	Uniformly cloudy after gentle mixing

Discard immediately (or if unopened, return to the pharmacy) if you see clumping or frosting on the inside of the vial.

Source:
American Diabetes Association @ www.diabetes.org