

## Safe Storage of Insulin

For the people with diabetes who use it, insulin is a vital need. It's important to store insulin as directed so that it remains usable by those who need it. Follow these tips to ensure effective insulin storage.

## 1. Keep It Cool

According to the product labels from all three U.S. insulin manufacturers, it is recommended that insulin be stored in a refrigerator at approximately 36°F to 46°F. If you are using ice, avoid freezing the insulin. **Do not use insulin that has been frozen.** 

## 2. Know Its Expiration Date

Unopened insulin refrigerated in the ranges described above maintains potency until the expiration date on the package.

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. However, **an insulin product that has been altered** for the purpose of dilution or by removal from the manufacturer's original vial **should be discarded within two weeks.** 

Insulin contained in the infusion set of a pump device (e.g., reservoir, tubing, catheters) should be discarded after 48 hours. Insulin contained in the infusion set of a pump device and exposed to temperature exceeding 98.6°F should be discarded.

## 3. Avoid Extreme Temperatures

Insulin loses some effectiveness when exposed to extreme temperatures. The longer the exposure to extreme temperatures, the less effective the insulin becomes. This can result in loss of blood glucose control over time. Keep insulin away from direct heat and out of direct sunlight.

Under emergency conditions, you might still need to use insulin that has been stored above 86°F. When properly stored insulin becomes available again, the insulin vials that have been exposed to these extreme conditions should be discarded and replaced as soon as possible.

For specific questions about your insulin and whether or not it can be used, contact the manufacturer:

Lilly: 1-800-545-5979 Sanofi-Aventis: 1-800-633-1610 Novo Nordisk: 1-800-727-6500

Contact: Insulin for Life