

## Med Refrigerator Temperature Excursions Below 36°F Can Affect Insulins and Put Residents at Risk

### Why is it important to keep your Insulin refrigerated and not go below 36 degrees?

- Generally, if storage conditions fall below 33-35°F, insulin viability must be validated by the manufacturer
  - ↑ Time and labor costs
  - ↑ Drug expenditure if insulin must be wasted
  - ↑ Likelihood of survey action
  - **Generally, if storage conditions fall below 33°F insulins must be discarded!**
- Residents may experience negative health outcomes due to the receipt of unviable insulin or delays in therapy while insulin supplies are replaced.
- Tight temperature control needs apply to vials, pens, and all formulations of insulin (although exact temperature ranges vary by product), as too low temperatures may denature the fragile insulin protein.

### Preventative Steps to Avoid Temperature Excursions

- **Maintain a temperature Log** to be completed on a daily basis (at minimum).
  - Minimizes the risk of temperature excursions as staff recognize refrigerators approaching low or high ends of the desired temperature range before excursions present.
  - Establishes a maximal time frame for how long refrigerated products have been exposed to out-of-range temperatures in the event of an excursion.
- **Store the thermometer within the refrigerator** and not on the door to avoid temperature variability occurring at refrigerator perimeters (middle of refrigerated items is ideal).
- **Invest in an electronic thermometer** that has an alarm and monitor outside the refrigerator, so potential temperature excursions are recognized and addressed quickly.

### Responding to a Temperature Excursion

**Quarantine affected refrigerated drug products to prevent dispensing to residents while their viabilities are determined. Contact the appropriate insulin manufacturer for specific guidance in any instance of refrigerated temperature excursion that affects an insulin product.**

- Insulin manufactured by Eli Lilly includes Basaglar, Humalog, Humulin, Semglee
  - Phone #: 800-545-5949
- Insulin manufactured by Novo Nordisk includes Novolog, Levemir, Fiasp, Tresiba
  - Phone #: 800-727-6500
- Insulin manufactured by Sanofi-Aventis includes Lantus, Apidra, Toujeo, Admelog
  - Phone #: 800-633-1610

**Please use a [temperature log](#) to track and document medications and refer to [insulin chart](#) for an overview of insulin products and storage.**