

Safe Use of Insulin

- Insulin (all forms) should be designated as a “high alert” medication within the organization.
- Strategies to reduce errors with insulin as a “high alert” medication should be delineated (eg, use of independent “double checks” at critical process or error-prone steps). Defined processes to recover from (ameliorate) insulin therapy errors when they do occur should be delineated and communicated to the staff.
- Hypoglycemia “rescue” agents (dextrose and glucagon) should be readily accessible throughout the organization. A standard method for management (eg, protocol or algorithm) of hypoglycemia should be approved, established, communicated, and readily available to caregivers.
- Insulin therapy orders should be reviewed for appropriateness prior to administration. All concerns should be resolved prior to insulin administration.
- Insulin should not be administered until a pharmacist has reviewed the latest insulin order(s), unless there is an emergent need and the drug is under the supervision of a licensed independent prescriber.
- Insulin orders should not be carried out until the order transcription has been verified and documented for accuracy by an independent double check.
- The following information should be readily available to the nurse reviewing insulin orders and/or administering insulin:
 1. Indication for use of insulin
 2. Insulin-dependency status
 3. Goals of insulin therapy
 4. Patient comorbidities
 5. Concurrent medications
 6. Prior insulin use and response
 7. Patient age, weight, and height
 8. Most recent blood glucose measurement results
- Insulin should not be stored at the bedside unless secure and under control of the nurse, even when patients are performing self-management. When insulin is needed, it should be obtained and provided to the patient for observed administration, then returned to a secure storage area.
- Patient nutrition status should be considered prior to administration of all insulin doses.
- All correction, supplemental, or adjustment doses of insulin should be based on bedside blood glucose measurements taken immediately prior to insulin administration along with appropriate assessment of nutritional (carbohydrate) intake and prior insulin doses and responses to insulin.

Safe Use of Insulin (cont)

- Rapid-acting insulins (and rapid-acting insulin mix products) should be administered only when meals are being consumed or present on the unit available for the patient to start to consume within 15 minutes.
- Only insulin syringes should be used to measure insulin doses.
- Insulin should be administered using appropriate safety procedures:
 1. Insulin should be administered only with proper patient identification using 2 identifiers (eg, compare arm band to medication administration record [MAR] or by bar-code identification) plus positive verbal verification by patient asking to state name and date of birth.
 2. Insulin should be measured only using correct size insulin syringes or appropriate insulin delivery devices (eg, insulin pens).
 3. Insulins should be mixed only according to manufacturer's recommendations.
 4. An independent double check with another caregiver should occur prior to administration that includes ordered dose, insulin type, and measured dose.
 5. Whenever appropriate, patient and/or family should provide additional double check.
 6. Patient should be evaluated for signs or symptoms of hypoglycemia.
 7. When insulin doses are measured in an insulin syringe, the doses should be prepared at the patient's bedside.
 8. The MAR should be brought into the patient's room during administration, unless prohibited by policy such as infection control concerns.
- Documentation of insulin administration should occur immediately following administration while at the bedside.