



PATIENT SAFETY TOOL BOX TALKS ©

SAFE CARE & SUPPORT



INSULIN SAFETY

v1.2



High Risk Medications- Insulin Safety

Insulin is a potent, lifesaving medication, but if prescribed or administered inappropriately has the potential to cause harm. It is therefore considered a 'High Risk' medication.

Safe use of Insulin

1. The abbreviation 'u' or 'iu' should not be written for units. The word 'units' must be written in full. U can look like 0 (zero) and IU can look like 1U or 10 which can result in overdoses.



Fig 1. Unapproved abbreviation

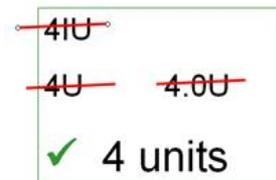


Fig.2 Approved Abbreviation

2. All insulins should be measured in insulin pens or in appropriately-sized insulin syringes marked in units. Tuberculin and other 1ml or 2ml syringes should **NOT** be used.



Fig. 3 Insulin Syringe

3. The strength of insulin products is standard at 100 units/ml.



Fig 4. 100 Units/ml

4. A second practitioner, either medical or nursing, should perform an independent second check of insulin doses. This second check must:

- include all aspects of administration irrespective of route or administration method,
- be conducted from preparation through to actual administration and documentation of administration
- include the use of any devices and calculations.

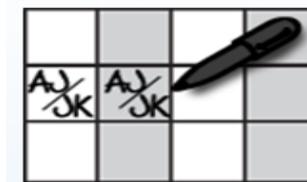


Fig 5. Second check

Other safety tips:

- Insulin pens are designed for 'single patient' use only. Sharing of pens, even when needles are changed, could result in transmission of pathogens to patients who use the same pen.
- Insulin pens should be labeled with the patients' details – Remember one pen, one patient.
- A sterile, disposable needle must be attached to an insulin pen for each use.
- Never store an insulin pen with a needle attached. Dispose of the needle carefully in the Sharps bin.
- Never draw insulin from a pen cartridge using a syringe and needle. There is potential for air embolism and incorrect dosages may be delivered if a dose is withdrawn manually and the cartridge then returned to the pen and used.
- Record the date opened on the insulin. Protect open, in-use pens from excessive heat (>25°C) and discard by their expiry date or 4-6 weeks after first opening as specified by the manufacturer, whichever is soonest.



Fig 5. Insulin pen



Fig 6. Insulin vial

Acknowledgments: Irish Medication Safety Network, August 2012