

Department Nursing Services' Standards Assessment Checklist for I.V. Bolus Drugs

Criteria 1: Hand washing / Hand rub as required.

Students need to perform the six steps of aseptic hand washing with soap and water. If their hands are clinically clean they can use alcohol based gel as long as they follow the six steps of hand hygiene.

[F] Criteria 2: Checked patient's name with wrist tag and treatment chart.

[F] Criteria 3: Enquired for any allergies associated with drug.

In criteria 2 and 3, students are expected to check with the treatment chart, or patient's notes, or patient (if conscious), and patient's ID tag.

[F] Criteria 4: Checked drug with treatment chart.

- [F] (i) Check the dose prepared with treatment chart.**
- [F] (ii) Counter check of drug name and dose prepared with treatment chart**
- [F] (iii) Check the drug/s and disposal equipment for expiry dates and signs of contamination**

Students need to demonstrate knowledge of the five 'rights'. They also need to counter check the drug again and most importantly see that all drugs used, reconstituters and all disposal equipment is not expired and is not contaminated like for example damaged wrappers.

Criteria 5: Counter checked patient's identity with treatment chart

Students are allowed to double check with assessor (in simulation tests) and with qualified nurses (in the clinical environment) or at least demonstrate knowledge of such criteria.

Criteria 6: Demonstrates an awareness of the importance of knowledge of drugs in/compatibility.

Students should demonstrate that they know where to check for such criteria – BNF/drug insert/Pharmacy.

Criteria 7: States at least one side effect from the particular drug to the given scenario whereby student is allowed to check with BNF [Literature/Pharmacy].

Students should explain such effects and if they have no knowledge about the drug, they should refer to the available information (BNF etc.).

[F] **Criteria 8:** Medication mixed accurately: reconstitution: _____ ; volume _____.

In the case of an ampoule with drug already in solution:

Students are expected to draw the exact volume according to the concentration indicated on the ampoule.

Eg.: If scenario requires students to prepare Frusemide 40mg and the ampoule states 20mg/ml, students need to draw exactly 2ml to make up exactly 40mg.

In the case of a vial with drug in powder state:

Students need to reconstitute the drug with the recommended volume and withdraw according to the dose required.

Eg.: If students are required to reconstitute a Zinacef 750mg vial with 10ml sterile distilled water and need to administer the full dose, they would need to withdraw all the volume from the vial irrespective whether it makes up exactly 10ml, more than 10ml or less than 10ml as this depends on the amount of volume students had initially injected in the vial and the property of the drug on whether the solution expands or contracts.

Hence in the scenario where students might have injected a bit more fluid than the recommended volume by the manufacturer (eg. 10.2ml) they should then withdraw all that volume if they are required to inject the full dose.

[F] **Criteria 9:** Aseptic technique followed while preparing the drug.

This criteria is considered a crucial one in the sense that if any contamination of equipment during the process of preparation and administration of the drug is observed, students get a straight fail.

N.B. If the scenario necessitates students preparing the drug in the treatment room, it can be done this way as long as the prepared drug is sufficiently covered and protected until it reaches the patient. In such case students need to get verbal consent and check the cannula prior the preparation of the actual drug.

Needle Recapping

Infection control policy stipulates that under no circumstances should needle recapping be practiced. However this addresses mainly used (contaminated) needles. In the case of IV drug preparations, since the needle is still sterile, safe recapping is allowed as long as students do not contaminate the needle.

If the needle is then used on the patient, it definitely should not be recapped but disposed off in the sharps container.

Criteria 10: Appropriate injection port used and correctly disinfected according to protocol.

Students need to wipe the **outside** of the cannula port (with the port hub still intact) with alcohol and leave it to dry before they can start pushing the drug IV.

Criteria 11: I.V. cannula checked for patency and any signs of phlebitis, infiltrations, and/or swelling around the cannula.

Students should be observed doing so and also asking patients if they are experiencing any pain on and around the cannula insertion site. Checking for patency can be done by injecting a small amount of flush solution (preferably 5ml to 10ml N/Saline or distilled water) prior to injecting the actual drug via the cannula port while observing if patient is complaining or demonstrating any signs of pain or whether the flush being injected is infiltrating into the surrounding tissues.

Criteria 12: Communication.

Students need to demonstrate effective communication through informed consent. The following are the criteria on which students will be assessed:

- (i) Introducing self
- (ii) Explaining procedure
- (iii) Providing clear instructions
- (iv) Make use of non-verbals

[F] Criteria 13: Correct dose administered.

This goes without saying and is crucial and reflects criteria No. 8.

[F] Criteria 14: Drug given over correct time frame.

Depending on scenarios, some drugs, although administered bolus, require them being pushed slowly to prevent the phenomenon of speed shock. Hence in such scenarios, students are expected to administer the drug according to the indicated time. If students do not have any idea on the time frame such drugs need to be pushed, they need to consult with the information provided in the ward (BNF, drug inset, or Pharmacy).

Criteria 15: The cannula is flushed after administration of the IV drug.

If there are no IV infusions attached to the peripheral cannula, students are expected to flush the drug with 5ml to 10ml sterile N/Saline (if compatible) or sterile distilled water.

If the patient is having an IVI infusion through the cannula, students are expected to stop the infusion by kinking the IVI line or by closing the roller clamp, push the drug and then continue the infusion, by unkinking the line or re-adjusting the rate through the roller clamp, only if the solution in the bag was compatible with the drug in the first place.

Confronted with the same scenario but the drug is not compatible with the IV fluid being administered through the cannula, students are expected to stop the infusion, flush the cannula with 5ml to 10ml sterile compatible flush solution (preferably N/Saline or distilled water), push the drug according to instructions, flush the cannula again as indicated above, and start the infusion again to its original rate.

[F] Criteria 16: Correctly documents the drug given.

(i) Counter signature requested for documentation

Students are expected to document the drug on the prescription sheet accurately, that is, enter the date (if necessary) and sign in the space against the time of the drug was due. Students need to demonstrate that a counter signature is necessary by the person who double checked with them.

Criteria 17: Indicates the need to monitor the patient for the drug's effect / side effect / reaction according to the given scenario.

Students are expected to give a rationale why they need to stay near the patient for a while especially if they suspect that the patient is having a reaction. They should at least know the cardinal signs and symptoms of anaphylactic shock or reaction and what action to take.

Criteria 18: All injecting materials disposed of correctly according to infection control policies.

Students are expected to know what should be disposed in the different containers, that is:

In the sharps container: Needles and sharp glass ampoules.

In the domestic bag: Plastic syringes, rubber capped glass vials, syringe wrappers, needle caps, and alcohol swabs.

P.S.: Even if a syringe is lightly soiled with blood, it still should be disposed of in the domestic bag.

Pass mark: 75% or better

[F] = Failing Point

N.B. Criteria preceded with an '[F]' indicate that if students fail **any one** of such criteria they get a straight 'FAIL' irrespective of the final mark they achieve.