

# I.V. push medication skill lab competency checklist

Although this checklist is designed for nursing students, it could also be used for assessing competency in practicing nurses.

Student: \_\_\_\_\_ Validator: \_\_\_\_\_ Date: \_\_\_\_\_

I.V. push medication \_\_\_\_\_

Key points <sup>1-4</sup>	Met	Not met
<b>1</b> Check the accuracy of the medication order (review electronic medication administration record (eMAR), orders, current condition, past medical history [PMH]).		
<b>2</b> Assess for any contraindications to the I.V. push medication (e.g., hypotension, abnormal laboratory results, abnormal glucose levels, active bleeding, upcoming procedures, new vs. old medication, PMH).		
<b>3</b> Perform the 10 rights of medication administration (right patient, right medication, right dose, right route, right time, right patient education, right documentation, right to refuse, right assessment, right evaluation).		
<b>4</b> Look up medication in the preferred drug reference guide. <b>Assessment</b> —identify right assessment before administering medication (e.g., vital signs, Pasero opioid-induced sedation scale, labs, last time and dose given, patient's prior response to medication).		
<b>5</b> Access vascular access device (VAD).		
<b>6</b> Use aseptic technique when preparing, administering, and locking VAD.		
<b>7</b> Prepare medication in designated clean, quiet environment.		
<b>8</b> Disinfect needleless connector using a vigorous mechanical scrub for 15 to 20 seconds using 70% alcohol. <sup>3</sup>		
<b>9</b> When a passive disinfection cap is first removed, there is no need to disinfect the needless cap again. However, for all subsequent access, the student should disinfect the hub with vigorous mechanical scrub for 15 to 20 seconds using 70% alcohol. <sup>3</sup>		
<b>10</b> Provide ongoing VAD site assessment for signs and symptoms of pain, infiltration, phlebitis, or extravasation.		
<b>11</b> Assess peripheral VAD site for patency using single dose 5 to 10 mL sodium chloride syringe. <i>Never</i> forcibly flush a VAD.		
<b>12</b> Administer medications in ready-to-use form or medication cartridge (using appropriate cartridge holder). <sup>4</sup>		
<b>13</b> <i>Never</i> dilute or reconstitute medications using commercially prefilled sodium chloride syringe.		
<b>14</b> Prepare one medication syringe at a time. Label all I.V. push medication syringes (include patient's name, drug name, dose, administration rate, and your initials). <i>Never</i> label a syringe in advance of preparing medication. <sup>4</sup> (In the case of ready-to-administer medications, no label is needed.)		
<b>15 Rate</b> —Administer medication at the rate recommended by the manufacturer/eMAR/drug reference guide using a watch or clock with a second hand. Follow with postflush using a single-dose 5 to 10 mL sodium chloride syringe (administer flush at the same rate of administration as the medication; pushing too fast can result in adverse drug effects). <sup>4</sup>		
<b>16</b> Evaluation should include closely monitoring the VAD site, patient's tolerance of the administration, noting any pain or discomfort at the VAD site. The student should monitor both the therapeutic and possible adverse effects of the I.V. push medication.		

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(continued)

<b>Medication preparation:</b>	<b>Met</b>	<b>Not met</b>
<b>1</b> Prepare medication in a designated clean, quiet environment, away from sinks. <sup>4</sup> Be sure surface is clean, and adhere to aseptic technique.		
<b>2</b> Obtain the medication and complete <b>first medication check</b> .		
<b>3</b> Always double-check high-alert medication drug dose calculation with second RN.		
<b>4</b> Gather equipment (e.g., appropriate-size syringe to draw up correct dose of medication, filter needle if necessary, cartridge holder, 70% alcohol).		
<b>5</b> Use evidence-based practice to administer medications in ready-to-use form. Never dilute or reconstitute medications using a prefilled sodium chloride syringe. <sup>4</sup>		
<b>6</b> Glass ampules—clean with 70% alcohol prior to breaking glass neck of ampule. Use a filter needle when drawing up out of glass ampule, then discard filter needle and change to blunt needle. <sup>3</sup>		
<b>7</b> When drawing from a vial, use aseptic technique. Caps on vials are dust covers only and not considered sterile. Scrub the diaphragm using 70% alcohol swab. Inject equal amount of air into vial before pulling out medication.		
<b>8</b> Must have two RNs to witness wasting a narcotic agent.		
<b>9</b> Must label (patient's name, drug name, dose, rate of administration, and your initials) all medication syringes prepared away from the bedside to prevent medication errors. <sup>1-3</sup>		
<b>10</b> Take original vial or ampule to bedside to scan medication.		

(continued)

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(continued)

## Administer I.V. push medication:

	Met	Not met
1 Knock on patient's door and introduce yourself.		
2 Wash your hands.		
3 Verify the patient's name, date of birth, and allergies by comparing name band to information found in the electronic health record. (Clinical faculty will log in to the computer for student access to the eMAR.)		
4 Complete <b>second medication check</b> and assess appropriateness of medication order: <ol style="list-style-type: none"> <li>When was it last given?</li> <li>Why is the patient receiving this medication?</li> <li>Are there any vital signs, labs, or data to assess prior to administering?</li> </ol>		
5 Don gloves.		
6 Assess VAD site for signs of infiltration, phlebitis, and extravasation; ask if patient has any pain at the site. If any of these are noted, do not use VAD and stop all continuous infusions.		
7 Disinfect needleless connector with vigorous mechanical scrub for 15 to 20 seconds using 70% alcohol. <sup>3</sup>		
8 Assess peripheral VAD site for patency using a single-dose 5 to 10 mL syringe of sodium chloride. Never forcibly flush a VAD.		
9 If fluids are infusing, students should have already confirmed compatibility of fluids and medication <sup>3</sup>		
10 Scan medication and <b>complete third medication check</b> —verify name, date of birth, and allergies and compare with information found on eMAR.		
11 Educate patient about medication being administered (purpose and potential side effects). Highlight two to three main side effects of the medication and document them on the patient's white board.		
12 If medication is compatible with I.V. fluid, then pause I.V. pump. Disinfect needleless connector hub proximal to patient with a vigorous mechanical scrub for 15 to 20 seconds using 70% alcohol. Clamp tubing above the injection hub and administer at rate outlined using: <sup>3</sup> <ol style="list-style-type: none"> <li>pharmacy instructions on eMAR</li> <li>manufacturer guidelines</li> <li>drug reference guide.<sup>4</sup></li> </ol>		
13 Administer medication at the rate recommended by the manufacturer using a watch or clock with a second hand.		
14 Once medication is administered, continue to keep I.V. fluid on pause and clamped, follow medication administration with a post single dose of 5 to 10 mL sodium chloride flush for the same rate recommended to administer medication. <sup>4</sup>		
15 After administration, unclamp tubing and resume I.V. fluid infusion.		
16 Dispose of all used material in appropriate receptacle (remember, sharps and syringes are to be disposed of in sharps container).		
17 Check with patient, evaluate for immediate response to nursing intervention. Be sure to know when to return to evaluate for onset and peak effect of medication. Monitor for adverse effects.		
18 Remove gloves and wash hands.		
19 Document medication administration.		

**Nursing students should prepare and administer I.V. push medications only under the direct supervision of clinical nurse faculty.**

**Dilution of I.V. push medication should be done only under recommendation of manufacturer, written on the eMAR, and/or under specific provider orders.**

Source: Denise Dion, Central Arizona College

1. Deutsch L. Dilution is no solution. *Nursing*. 2020;50(5):61-62.

2. Gorski LA. The 2016 infusion therapy standards of practice. *Home Healthc Now*. 2017;35(1):10-8.

3. Infusion Nurse Society. Section six: Vascular access device (VAD) management. *Infusion Therapy Standards of Practice*. *J Infus Nurs*. 2016;39(1S):S68-93.

4. Institute for Safe Medication Practices. Safe practice guidelines for adult IV push medications. July 23, 2015. [ismp.org/guidelines/iv-push](http://ismp.org/guidelines/iv-push)