

# Introduction to Intravenous (IV) Bolus Medication Administration Curriculum



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## About the Author



Kasey Carlson has been a Registered Nurse for 17 years. She holds a Master's degree in Nursing Education from the University of Wisconsin – Eau Claire and has been teaching associate degree nursing for over 11 years. She also has a second Master's degree in Learning Design and Technology from San Diego State University. Ms. Carlson specializes in healthcare simulation curriculum design.

## Lesson Structure

Each lesson begins with a Lesson Overview, Lesson Objectives and a Lesson at a Glance table which lists the lesson activities, materials required, suggested preparation steps and approximate class time.

### Lesson Sections

The actual lesson follows the overview, which will contain some of the sections described below.

#### ***FOCUS***

Every lesson begins with a FOCUS activity intended to capture participants' attention. This may be in the form of a small or large class discussion, a game, a review of previous lesson information, or a demonstration. During this activity, participants are introduced to the topic of the lesson.

#### ***LEARN***

The LEARN activity in each lesson varies in its presentation mode. It may be a slide presentation, group activity, or demonstration.

#### ***REVIEW***

The majority of lessons end with a REVIEW activity intended to briefly review the lesson's key messages or main points.

# Lesson One - Introduction to IV Bolus Medication Administration

## Lesson Overview

*In this lesson, students will learn about the medication administration using an IV bolus.*

## Lesson Objectives

After completing this lesson, participants will be able to:

- Identify guidelines for safe medication administration
- Discuss indications for IV boluses
- Demonstrate proper IV bolus technique
- Explain how to document an IV bolus

## Pre-Lesson Knowledge

- Basic IV infusion practice
- Dosage calculation
- Safe medication administration practices

## Lesson at a Glance

Activity	Materials	Preparation	Approximate class time
FOCUS: Part 1	<ul style="list-style-type: none"> <li>• <i>Introduction to IV Bolus Medication Administration (Focus on Empathy)</i> worksheet</li> <li>• <i>Introduction to IV Bolus Medication Administration (Focus on Empathy) Instructor Resource</i></li> </ul>	1. Print/photocopy <i>Introduction to IV Bolus Medication Administration (Focus on Empathy)</i> worksheet (one per participant)	10 minutes
FOCUS: Part 2	<ul style="list-style-type: none"> <li>• <i>Introduction to IV Bolus Medication Administration (Focus on Safety)</i> worksheet</li> <li>• <i>Introduction to IV Bolus Medication Administration (Focus on Safety) Instructor Resource</i></li> </ul>	2. Print/photocopy <i>Introduction to IV Bolus Medication Administration (Focus on Safety)</i> worksheet (one per participant)	10 minutes
LEARN	<ul style="list-style-type: none"> <li>• <i>Introduction to IV Bolus Medication Administration</i> slide presentation</li> <li>• <i>Introduction to IV Bolus Medication Administration Check-Off (Sample Medication Administration Record)</i></li> <li>• IV model or simulator with saline lock</li> </ul>	1. Prepare <i>Introduction to IV Bolus Medication Administration</i> slide presentation for viewing 2. Print/photocopy <i>Introduction to IV Bolus Medication Administration Check-Off (Sample Medication Administration Record)</i> (one per participant)	20 minutes
REVIEW	<ul style="list-style-type: none"> <li>• <i>Introduction to IV Bolus Medication Administration</i> slide presentation</li> <li>• <i>Introduction to IV Bolus Medication Administration Check-Off (Instructor Resource)</i></li> <li>• <i>Introduction to IV Bolus Medication Administration Check-Off (Sample Medication Administration Record)</i></li> <li>• <i>Introduction to IV Bolus Medication Administration Check-Off (Sample Provider's Orders)</i></li> </ul>	1. Print/photocopy (one per participant): <ul style="list-style-type: none"> <li>• <i>Introduction to IV Bolus Medication Administration Check-Off (Sample Provider's Orders)</i></li> <li>• <i>Introduction to IV Bolus Medication Administration Check-Off</i> worksheet</li> <li>• <i>Introduction to IV Bolus Medication Administration Check-Off (Medication Administration Record)</i> worksheet</li> </ul>	30 minutes

## Introduction to IV Bolus

	<ul style="list-style-type: none"> <li>• <i>Introduction to IV Bolus Medication Administration Check-Off</i> worksheet</li> <li>• <i>Introduction to IV Bolus Medication Administration Check-Off (Medication Administration Record)</i> worksheet</li> <li>• <i>Introduction to IV Bolus Medication Administration Quiz</i></li> <li>• <i>Introduction to IV Bolus Medication Administration Quiz - Answer Key</i></li> </ul> <p>Supplies:</p> <ul style="list-style-type: none"> <li>• Med cart or mock med cart</li> <li>• Mock/demo vial of hydromorphone (Dilaudid)</li> <li>• IV model or simulator with saline lock</li> <li>• 3cc syringes with needles</li> <li>• Alcohol swab</li> <li>• Normal saline flush solution</li> <li>• Hand sanitizer or access to a sink</li> <li>• Watch or access to clock</li> <li>• Clean gloves</li> <li>• Sharps container</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Introduction to IV Bolus Medication Administration Quiz</i></li> </ul> <p>2. Get the supplies ready for the lesson</p>	
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Instructor Note: For FOCUS and REVIEW activities, the instructor may choose to have students complete both or one of the two activities. FOCUS activities may also be completed prior to class.

## Lesson One - Introduction to IV Bolus Medication Administration

# REVIEW: Practice and Assessment of IV Bolus Medication Administration

30 minutes

### Purpose:

Participants will practice IV Bolus Medication Administration on models and then complete a quiz to assess mastery.

### Materials:

- *Introduction to IV Bolus Medication Administration Check-Off (Instructor Resource)*
- *Introduction to IV Bolus Medication Administration Check-Off (Sample Medication Administration Record)*
- *Introduction to IV Bolus Medication Administration Check-Off (Sample Provider's Orders)*
- *Introduction to IV Bolus Medication Administration Check-Off* worksheet
- *Introduction to IV Bolus Medication Administration Check-Off (Medication Administration Record)* worksheet
- *Introduction to IV Bolus Medication Administration Quiz*
- *Introduction to IV Bolus Medication Administration Quiz - Answer Key*
- Injection pad, model or simulator

### Supplies:

- Med cart or mock med cart
- Mock/demo vial of hydromorphone (Dilaudid)
- IV injection pad model or simulator with saline lock
- 3cc syringes with needles
- Alcohol swab
- Normal saline flush solution
- Hand sanitizer or access to a sink
- Watch or access to clock
- Clean gloves
- Sharps container

### Facilitation Steps:

1. Give students the following handouts:
  - *Introduction to IV Bolus Medication Administration Check-Off (Sample Medication Administration Record)*
  - *Introduction to IV Bolus Medication Administration Check-Off (Sample Provider's Orders)*
  - *Introduction to IV Bolus Medication Administration* worksheet
  - *Introduction to IV Bolus Medication Administration Check-Off (Medication Administration Record)* worksheet
2. Access the *Introduction to IV Bolus Medication Administration Check-Off (Instructor Resource)*. Following the steps on the check-off page, demonstrate an IV Bolus Medication Administration on the injection pad, model or simulator.
3. Have students review the *Sample Medication Administration Record* and *Sample Provider's Orders*. Answer any questions students may have on using these.
4. Following the steps on their *Introduction to IV Bolus Medication Administration* worksheet, have students practice IV Bolus Medication Administration on the injection pad, model or simulator available.
5. Students should properly document their injection on the *Introduction to IV Bolus Medication Administration Record* worksheet.
6. Hand out the *Introduction to IV Bolus Medication Administration Quiz* to students. Give them a couple of minutes to complete it.
7. Have students self-check or peer check their answers as you share them from the *IV Bolus Medication Administration Quiz - Answer Key*.

# Introduction to IV Bolus Medication Administration Check-Off

## (Sample Provider's Orders)

Date	Time	Orders
<i>Today</i>	<i>0700</i>	<i>Admit to medical floor post op</i>
		<i>Dilaudid (hydromorphone hydrochloride 1 mg in 1 mL) 0.5 mL to 1 mL PRN IV over 3 minutes every 2-3 hours for pain greater than 7/10</i>
		<i>If pain persists, call provider</i>
		<i>Dr. Robert Benson</i>

Grant, Thomas H.  
 MRN: 6985477  
 Age: 47 years  
 Date of Birth: 01/08/XXXX



# Introduction to IV Bolus Medication Administration Check-Off

**PART ONE:** Practice IV Bolus Medication Administration on the model using the following steps:

Verify MAR with written order from provider.
Review medication reference information (proper dosage, side effects, compatibility, rate, etc.).
Gather supplies needed for preparing and administering medication.
Wash your hands with sanitizer or soap/water.
Compare MAR with medication; complete the Rights of Administration.
Wash your hands with sanitizer or soap/water.
Gather supplies. Lock medication cart and ensure no patient information is visible per HIPAA.
Knock, enter room and provide for privacy.
Identify yourself with name and title (student nurse, medical assistant, etc.).
Wash your hands with sanitizer or soap/water.
Identify patient by asking name and date of birth. Verify this information with the MAR.
Explain the procedure to the patient and ask if they have any questions. Verify allergies with MAR.
If not completed at the cart, draw up the correct dose and complete the Rights of Administration.
Apply clean gloves.
Assist patient to comfortable position and inspect IV site.
Hold onto port closest to patient and clean port with alcohol swab; allow to dry.
Remove cap from saline flush, expel air and connect to port.
Pull back gently on plunger of syringe to aspirate for blood return.
Flush with 2-3mL of saline and remove syringe. Keep holding port or clean again with new swab.
Remove needle from medication syringe, expel air and attach syringe to port.
Administer medication at the correct rate.
Remove syringe. Attach saline flush keeping luer lock sterile and port clean or swab again.
Flush with 2-3mL of saline at the same rate as the medication was administered. Remove syringe.
Dispose of needle in sharps container.
Ask your patient if they are comfortable and if they have any questions. Observe for any reactions.
Remove gloves and wash your hands with sanitizer or soap/water.
Document medication administration on the MAR.