



Independent Study

Participant Study Guide

Medication Administration Training (MAT) Independent Study

Overview

Caring for children is a rewarding and demanding profession. You work hard to develop a caring and trusting relationship with the children in your program. To provide the best care, you learn techniques and strategies to provide a nurturing and responsive environment. Part of this care may be giving medication to help children regain their health or to help them maintain it.

The MAT course is a skill-based training to help you give medication safely in your program. The course is eight (8) hours of training and includes information on video as well as hands-on demonstrations.

The training provides an overview of medication effects and ways to give medication for both over-the-counter and prescription medication; the handling, storage and safe disposal of medication; permission and instruction requirements; preparation and administration techniques; asthma; emergency care and special situations.

If you are a child day care provider or employee in New York State working in family day care, group family day care, school age, day care centers, small day care centers or legally exempt providers serving children whose child care is being funded through public child care subsidies you can take the MAT course.

There are two different ways you can get a MAT certificate: in classroom instruction or independent study. This guide is for providers interested in taking the course by independent study. If you would like more information on taking the course with classroom instruction, go to www.tsg.suny.edu.

MAT Independent Study

The Medication Administration Training (MAT) Independent Study is comprised of two parts. The first part is a self paced review of the MAT course content using materials such as handouts, video segments and independent exercises. The second part consists of hands-on practice time and testing with an approved MAT Trainer.

Part One: Content

The MAT course consists of eight modules, ranging from medication effects to safe medication administration. The material for each of these modules is available for download through the MAT Program website: www.matstudy.com. You can access and use these materials at any time during the day or night.

Part Two: Practice and Testing

Once you have reviewed all of the MAT course content in Part One, you must complete testing in order to receive a MAT certificate. There are two different tests you will complete; a written test and a skills test. This part of MAT Independent Study is completed in a classroom with an approved MAT Trainer. Before you are tested, you will have time to practice all of the skills you studied with an approved MAT Trainer and ask questions.

Part One

You will study the MAT materials on your own, at your own pace. The MAT course is broken into different training sessions:

- Introduction
- Module 1: Medication Overview
- Module 2: Handling of Medication
- Module 3: Safety Precautions related to Medication Administration
- Module 4: Safe Medication Administration
- Module 5: Preparation and Administration Techniques
- Module 6: Asthma
- Module 7: Emergency Care
- Module 8: Special Situations
- Conclusion

Completing Part One of MAT Independent Study

Be sure to read this study guide as you complete each of the training sections. Since each module builds upon information covered in the previous module, it is important for you to complete the modules in order. When starting a module, make sure you have all the handouts. Each module has at least one video unit so you want to have access to your computer while reviewing the handouts.

MODULE REVIEW

Introduction

This section provides an overview of the MAT course and who is required to take the training.

Instructions

1. Review Handout Intro.1 **Medication Administration Training (MAT) Course Overview** and Handout Intro.2 **Glossary**.
2. Watch the "Introduction" video segment.

Module 1: Medication Overview

This module provides an overview of medication usage. Topics include desired and undesired effects of medication, the seven different routes of medication administration covered in the MAT course and categories of medication such as prescription, over-the-counter, generic and brand name medication.

At the end of this module, you will be able to:

- identify reasons why children are given medication
- identify differences between mild side effects, adverse effects and allergic reactions; and how to respond to each effect
- list the seven (7) medication routes covered in the MAT course
- identify the three (3) medication routes you would need additional training to administer
- define and identify common over-the-counter medication
- define and identify common prescription medication
- define and identify common brand name medication
- define and identify common generic name medication

Instructions

1. Review Handout 1.1 **Medication Effects**.
2. Watch the "Medication Effects" video segment.
3. Review and complete Handout 1.6 **Medication Effects Case Scenarios**.
4. Review Handout 1.7 **Medication Effects Case Scenarios Answer Key** for the correct answers.
5. Review Handout 1.2 **Medication Routes** and Handout 1.3 **Overview of the Medication Routes Covered in the MAT Course**.
6. Watch the "Medication Routes" video segment.
7. Review Handout 1.4 **Types of Medication** and Handout 1.5 **Package Insert**.
8. Watch the "Medication Categories" video segment.

Module 2: Handling of Medication

This module covers the handling and preparation needed before administering medication. Topics include permission, instruction and medication label requirements needed before giving any medication and correct documentation. This module also covers accepting medication from a parent, proper storage and safe disposal of medication.

At the end of this module, you will be able to:

- identify the permissions needed to administer prescription medication to children in their care
- identify the permissions needed to administer over-the counter medication to children in their care
- identify the difference between one-day and on-going medication
- identify the items needed for medication instructions from the licensed authorized prescriber
- identify the required prescription medication label elements
- identify the meaning of common abbreviations
- identify the reasons for keeping a record of medication administration
- identify the necessary items that must be documented for each medication administration
- identify components of a safe process for receiving medication from parents
- state the optimal conditions for storing most medication
- state how to safely store medication requiring refrigeration
- identify how to keep controlled substances secure
- explain how to safely handle unused, expired or discontinued medication

Instructions

1. Review the following handouts: Handout 2.1 **Administration Tools and Medication Label Requirements**, Handout 2.2 **Common Medical Abbreviations**, Handout 2.3 **Minimum Permission Requirements On-Going Medication Administration**, Handout 2.4 **Written Medication Consent Form**, Handout 2.5 **Log of Medication Administration** and Handout 2.6 **Best Practice Techniques for Medication Documentation**.
2. Watch the “On-Going Permissions, Instructions and Documentation” video segment.
3. Using Handouts 2.8 – 2.10, review and complete Handout 2.7 **Accepting Medication from Parent and Documentation Exercise**.
4. Review Handouts 2.7, 2.8 and 2.10 Answer Keys for the correct answers.
5. Review the following handouts: Handout 2.11 **Minimum Permission Requirements Parent Arrives at Program and Requests Administration of Medication**, Handout 2.12 **Minimum Permission Requirements Develops Symptoms While in Care**, Handout 2.13 **Verbal Medication Consent Form and Log of Administration**, Handout 2.14 **Approved Waiver Minimum Permission Requirements Parent Arrives at Program and Requests Administration of Medication** and Handout 2.15 **Approved Waiver Minimum Permission Requirements Develops Symptoms While in Care**.
6. Watch the “One-Day Medication Permissions, Instructions and Documentation” video segment.
7. Review and complete Handout 2.17 **Permissions and Instructions Case Scenarios**.
8. Review Handout 2.17 Answer Key for the correct answers.
9. Review Handout 2.16 **Handling, Storage and Disposal of Medication Checklist**.
10. Watch the “Handling, Storage and Disposal” video segment.
11. Review and complete Module 2 – **Participant Independent Exercise #1 – Reviewing a Completed Form**.

Module 3: Safety Precautions related to Medication Administration

This module discusses safety precautions to be considered when giving medication including proper glove use and hand washing.

At the end of this module, you will be able to:

- identify the correct gloving procedure and correct glove disposal
- identify the steps of appropriate hand washing for administering medication

Instructions

1. Review Handout 3.1 **Glove Use for Medication Administration** and Handout 3.2 **Sanitizing Surfaces Contaminated by Blood or Body Fluids.**
2. Watch the “Safety Precautions for Medication Administration” video segment.
3. Review Handout 3.3 **Hand Washing.**
4. Watch the “Hand Washing” video segment.

Module 4: Safe Medication Administration

This module discusses the general principles of giving medication to children in a child day care setting. Topics include age appropriate medication administration techniques, how to deal with ill or uncooperative children, what steps to take if you cannot give an ordered medication, using the Five Rights and Medication Phases to accurately administer medication and avoid medication errors.

At the end of this module, you will be able to:

- identify age appropriate techniques to use when giving medication to a non-mobile infant as well as a mobile infant
- identify age appropriate techniques to use when giving medication to a toddler
- identify age appropriate techniques to use when giving medication to a preschooler
- identify age appropriate techniques to use when giving medication to a school age child
- identify techniques that are not appropriate to use when administering medication to children
- explain the appropriate action to take if a medication is not taken in the complete form
- explain what to do if an infant or child will not take the medication
- list the Five Rights of Medication Administration
- state the appropriate times to check the medication consent form and the log of medication administration for the Five Rights when administering medication to children
- state how to correctly administer “as needed” medication for a specific condition or change in condition(s) as instructed by the child’s health care provider
- identify the conditions necessary for safe medication administration

Instructions

1. Review Handout 4.1 **Do’s and Don’ts for Administering Medication to Children** and Handout 4.2 **Special Situations**.
2. Watch the “Giving Medication to Children, including Ill and Uncooperative Children” video segment.
3. Review Handout 4.3 **The Five Rights of Safe Medication Administration**.
4. Watch the “Five Rights of Medication Administration” video segment.
5. Review Handout 4.4 **Deciding Where You Will Administer Medication** and Handout 4.5 **Medication Administration Phases**.
6. Watch the “Medication Administration Phases” video segment.
7. Review and complete **Participant Independent Exercise #2**.
8. Review **Participant Independent Exercise #2 Answer Key** for the correct answers.

Module 5: Preparation and Administration Techniques

This module describes the step-by-step process for giving medication by specific routes.

At the end of this module, you will be able to:

- demonstrate the ability to correctly administer medication by one of the following routes: oral, topical, medicated patches, inhaled, eye or ear medication
- demonstrate how to measure the correct dose using one of the following: a liquid medicine cup, dosing spoon, or oral medication syringe
- identify the reasons why medication related equipment and supplies must be kept clean
- explain the cleaning techniques for medicine cups, dosing spoons, oral medication syringes, medication droppers, pill crushers or metered dose inhalers

Instructions

1. Review the following Handouts: Handout 5.1 **Oral Medication Administration: Tablets and Capsules**, Handout 5.2 **Oral Medication Administration: Crushed Tablets**, Handout 5.3 **Oral Medication Administration: Sprinkles**, Handout 5.4 **Oral Medication Administration: Liquids Medication Cup**, Handout 5.5 **Oral Medication Administration: Liquids Dosing Spoon**, Handout 5.6 **Oral Medication Administration: Liquids Oral Medication Syringe**, Handout 5.7 **Oral Medication Administration: Liquids with a Dropper** and Handout 5.8 **Oral Medication Administration: Applying Medication to the Gums**.
2. Watch the “Administering Oral Medication” video segment.
3. Review the following handouts: Handout 5.9 **Topical Medication Administration: Creams, Gels, Lotions and Ointments**, Handout 5.10 **Topical Medication Administration: Aerosols**, Handout 5.11 **Medicated Patch Administration**, Handout 5.12 **Inhaled Medication Administration: Nasal Drops**, Handout 5.13 **Inhaled Medication Administration: Nasal Sprays**, Handout 5.14 **Inhaled Medication Administration: Oral Metered Dose Inhaler** and Handout 5.15 **Inhaled Medication Administration: Oral Metered Dose Inhaler with Spacer**.
4. Watch the “Administering Topical, Medicated Patches and Inhaled Medication” video segment.
5. Review Handout 5.16 **Eye Medication Administration: Drops**, Handout 5.17 **Eye Medication Administration: Ointment** and Handout 5.18 **Ear Medication Administration: Drops**.
6. Watch the “Administering Eye and Ear Medication” video segment.
7. Included in your training packet is a Participant Pre-Demonstration Practice Scenario and a video segment. This information is included for you to become familiar with the information. If you have any questions about this pre-demonstration practice, talk with your MAT Trainer when you are complete Part Two of Independent Study.

Module 6: Asthma

This module provides you with information you need to safely and effectively care for a child who has asthma. Topics include an overview of asthma, the use of an asthma care plan and the basics on how to use and care for a nebulizer machine.

At the end of this module, you will be able to:

- identify asthma “early warning signs”
- identify common asthma triggers
- identify measures to prevent an asthma episode
- state reasons for using a nebulizer machine
- identify how to appropriately set-up a nebulizer machine using manufacturer’s instructions
- identify how to administer medication using a nebulizer machine by following the manufacturer’s instructions
- identify the appropriate process for cleaning a nebulizer after each use

Instructions

1. Review Handout 6.1 **Asthma Facts** and Handout 6.2 **Treatment Options for Children with Asthma**.
2. Watch the “What is Asthma” video segment.
3. Review Handout 6.3 **Example of a Care Plan for a Child with Asthma** and Handout 6.4 **Asthma Action Plan**. These handouts represent two examples of asthma care plans you might see. There are many additional asthma care plans available. Which ever plan you use, remember that the plan needs to have the information you need to safely care for the child and meet his care needs.
4. Review Handout 6.5 **Medication Administration Using a Nebulizer** and Handout 6.6 **Care of a Nebulizer Machine**.
5. Watch the “Nebulizer Treatments” video segment.
6. You will have time to practice using a nebulizer machine during Part Two. You will not be required to demonstrate this administration technique.
7. Review Module 6 – **Participant Independent Exercise #3 – Asthma Handout** and **#4 – Asthma Quiz**. These materials are included for your reference. You will not be tested on the information included in these handouts.

Module 7: Emergency Care

This module discusses emergency care. Topics include unintentional medication poisoning, stocking a first aid kit, keeping non child-specific over-the-counter medication, recognizing anaphylaxis, and how to administer an epinephrine auto-injector in the event of a severe allergic reaction.

At the end of this module, you will be able to:

- explain the potential danger of unintentional medication ingestion and exposure
- identify how to prevent unintentional poisoning from medication in the child care setting
- describe the appropriate actions to take in the event of an unintentional medication poisoning
- identify the symptoms of anaphylaxis
- state when they need to call 9-1-1 or other first responder in their area
- identify the permissions needed to administer an epinephrine auto-injector device
- identify how to appropriately store an epinephrine auto-injector device, specifically an EpiPen® or EpiPen Jr.®
- identify how to correctly administer an epinephrine auto-injector device, specifically an EpiPen® or EpiPen Jr.®

Instructions

1. Review Handout 7.1 **Prevention of Unintentional Medication Poisoning.**
2. Watch the “Unintentional Medication Poisoning” video segment.
3. Review Handout 7.2 **Symptoms of Anaphylaxis.**
4. Watch the “Anaphylaxis” video segment. Be advised that the packaging of EpiPen® has changed since this video was made. The new EpiPen® has a red flag that appears in the clear window, indicating that the correct dose has been received. The new EpiPen® comes in a hard plastic container with either a yellow or green screw-top. After the needle has been exposed, the auto-injector should be inserted back on completely into the storage tube without bending the needle back. The storage tube provides built-in needle protection after use.
5. Review Handout 7.3 **EpiPen® Use and Storage.** The Office of Children and Family Services regulations allow child care providers who are approved medication administrators to give epinephrine via an auto-injector device. Currently EpiPen® is the only product available that is a true “auto-injector”. If a parent supplies you with another type of epinephrine injector device, talk with your program’s health care consultant to find out if it is considered an auto-injector or not. If it is not considered an auto-injector you would need to get additional training on the proper use of the device. Please be aware that the epinephrine product Twinject™ is part auto-injector and part injection. You will need additional training before you would be able to give Twinject™ medication in a child care program.
6. Watch the “Treatment: Use of an Epinephrine Auto-Injector Device” video segment.
7. Review Handout 7.4 **First Aid Kit** and Handout 7.5 **Stock Medication Policy Statement.**
8. Watch the “First Aid Kit” video segment.

Module 8: Special Situations

This module discusses special situations that may arise when administering medication to children in a child care setting. Topics include medication errors, issues to consider for allowing a child to independently administer medication in a child care setting, children with special health care needs and things to consider regarding medication administration on a field trip.

At the end of this module, you will be able to:

- identify medication errors
- identify the steps to follow if a medication error occurs
- explain the appropriate action to take if a medication is not given
- define active medication participation
- define independent medication administration
- explain the appropriate process if the program would like to allow a child to independently administer medication
- identify the process for administering medication off the program site
- explain how to safely transport medication including medication requiring refrigeration when off the program site
- explain how to document medication given off the program site
- identify the components that should be included in the program's field trip plan as it relates to medication administration

Instructions

1. Review Handout 8.1 **Medication Errors** and Handout 8.2 **Medication Error Report Form**.
2. Watch the "Medication Errors" video segment.
3. Review Handout 8.3 **Active Participation and Independent Medication Administration**.
4. Watch the "Active Participation and Independent Medication Administration" video segment.
5. Review Handout 8.4 **Children with Special Health Care Needs** and Handout 8.5 **Individual Health Care Plan for a Child With Special Health Care Needs**.
6. Watch the "Children with Special Health Care Needs" video segment.
7. Review Handout 8.6 **Checklist for Administering Medication on a Field Trip**.
8. Watch the "Field Trips" video segment.

Conclusion

Instructions

1. Review Handout Conclusion.1 **Next Steps**.
2. Watch the "Conclusion" video segment.

Part Two – Practice and Testing

After completing Part One, you are ready to complete Part Two of the MAT Independent Study course. Part Two is the practice and testing portion of the training and must be completed in order to receive a MAT certificate. Part Two must be completed with an approved MAT trainer.

Part Two is completed in a classroom with an approved MAT Trainer and consists of both practice time and skills testing. You will work with a MAT Trainer to schedule approximately 3 hours of time. One hour of this time will be used to review MAT concepts and to practice administering medication using materials provided by the trainer. The remaining time is will be for completing the written test and skills tests. Keep in mind, if you need to retake any of the tests, you will need to plan for more time with the trainer.

Remember, there may be a cost to take this part of MAT Independent Study so it is important for you to talk with the trainer about fees for this testing and any payment requirements. As with the traditional MAT course, grant money is available through the SUNY MAT Grant Program to offset the cost of this testing.

Competency Tests

You must successfully complete both the written and skills tests in order to receive a MAT certificate. The written test consists of 60 multiple-choice questions. The test is an “open-book” test, which means you can use all of your handouts when taking the test. **Be sure to bring your own copies of the MAT Handouts when you get tested.** You must get at least 80% to pass the written test. The written test has some questions marked with a star. These questions are considered critical test questions and you must answer them correctly in order to pass the test. If you fail the written test on your first try, you can take the test again. The second test will have different questions.

You must complete three skills demonstrations. The skills demonstrations will test your ability to safely give medication using techniques covered in the MAT course. The three demonstrations include:

- A demonstration of your ability to follow the medication administration process, including preparing to give the medication, giving the medication and writing down that you gave the medication. You will randomly select **one** of the following ways to give medication to show the trainer you understand how to give medication safely: oral, topical, inhaled, eye or ear medication or the application of a medicated patch following the Five Rights of Medication Administration
- A demonstration of your ability to measure liquid medication using either a medication cup, a dosing spoon or an oral medication syringe
- A demonstration of how to give an epinephrine auto-injector in the event of a severe allergic reaction

The MAT Trainer will review all of the steps before you start testing. Once you begin, the trainer will watch you complete each of these skills demonstrations. As with the written test, you can use all of your handouts while doing the skills demonstrations. You have two opportunities to pass each of the skills tests.

Preparing for the Tests

You will be prepared to take the written test after you have reviewed and studied the handouts and video. Remember, you can use all of the handouts while taking the written test.

When preparing for the skills demonstration, watch the video segment “Randomized Skills Demonstration”. This video segment shows a child care provider completing two of the skills demonstrations. In addition, review the “Practice Skills Demonstration” handouts. You can use these to practice all of the techniques you learned during your practice time with the MAT Trainer.

You will use handouts 4.5 and 5.1 – 5.18 when doing the randomized skills demonstration. Reviewing these handouts with the trainer will help you prepare for the skills demonstration. Since the trainer is unable to coach or prompt you once the skills testing begins, be sure to ask any questions before you begin the skills testing.

When you are completing the skills demonstration to show you can measure a liquid medicine, you will use a medicine cup, dosing spoon or an oral syringe. To prepare for this skills demonstration, work with the trainer during the practice time so you are able to use each device correctly.

You will also need to show the trainer you know how to correctly give an EpiPen® auto-injector following the package instructions. To prepare for this skills demonstration, review the instructions for EpiPen® use (Handout 7.3) and work with your trainer during the practice time to practice each step.

MAT Training Certificate

Once you successfully complete the written and skills tests, you will receive a MAT certificate and be awarded eight (8) hours of training credit in the following topic areas: statutes and regulations pertaining to child care; nutrition and health needs of children and safety and security procedures, including communication between parents and staff.

This certificate will state that you completed the MAT course and demonstrated competency in the administration of medication in a day care setting.

The MAT training certificate:

- Is for the giving medication in a child day care setting ONLY
- Is good for three (3) years. If you leave the child care field for a continuous period of more than one year, the certificate will no longer be valid.
- Identifies the language(s) in which you can accept permission and instructions from the child’s parent and health care provider. You cannot accept medication permission and instructions in any other language. This includes package inserts or related materials.

Ability to Give Medication in a Child Day Care Program

A MAT certificate alone does NOT allow you to give medication in a child day care program. In addition to a valid MAT certificate, you must meet the following requirements **before** you will be approved to give medication in a day care program:

- Be 18 years old
- Have a current first aid certificate that covers the ages of the children in your care
- Have a current CPR certification that covers the ages of the children in your care
- Be listed in your program's approved health care plan as a medication administrant. In order to be approved, the health care plan must be signed by your program's health care consultant and be submitted and approved by the program's licensor or registrar.

You are responsible for making sure you are listed in your program's health care plan **before** giving medication in the program. If you are not familiar with your program's health care plan, speak with your supervisor and ask for a copy of the plan.

Contact the MAT Program

A MAT Program representative is available during regular business hours to answer general questions related to MAT Independent Study.

Phone: 1-866-665-5537

Email: mat@tsg.suny.edu.