State of Delaware
Office of Child Care Licensing
ADMINISTRATION OF MEDICATION
SELF-STUDY TRAINING GUIDE

The Nurse Practice Act allows child care providers to administer medication to children in child care facilities regulated by the State. The law allows child care providers to give prescription and non-prescription medication, as long as a parent/guardian has given written permission and the child care provider giving the medication successfully passed the Administration of Medication test on the information found in this training guide.

MEDICATION ADMINISTRATION EXAM AND DEMONSTRATION OF SKILLS COMPETENCY

- Child care providers must score at least 85% on the test to receive the administration of medication certificate.
- If you do not receive a passing grade, you will need to contact OCCL to register to take the test again. A fee is charged each time you take the test.
- Your certificate is valid for five years.
- You must keep the original certificate as proof that you passed the test. OCCL does not keep copies of these certificates.
- This certificate is valid only in Delaware licensed family and large family child care homes and in Delaware licensed early care and education and school-age centers.

Course Overview

Module I: Legal Responsibilities, Administration of Medication, and the "Six Rights" of Medication

- Legal and ethical responsibilities;
- Administration of medication by child care providers; and
- "Six Rights" of Medication Administration.

Module II: Classification and Use of Medication

- Classification of medication; and
- Using, misusing, and abusing medication.

Module III: Preparation for Administration of Medication

- Requirements;
- Properly labeled prescription;
- When <u>not</u> to administer medication;
- Refusal of medication;
- Proper use of medication.

Module IV: Medication Administration Procedures

- General procedures for medication administration;
- Specific procedures for medication administration; and
- Medication techniques for infants/toddlers.

Module V: Medication Administration Record (MAR) Documentation, Medication Errors, and Avoiding Medication Errors

- Documentation on the Medication Administration Record (MAR);
- Medication Errors; and
- Avoiding Medication Errors.

Module VI: Medication Effects

- Three basic effects of major medication groups; and
- The Adverse Effects of Medication.

Module VII: Emergency-Use Medication

- Administering Diastat® for seizures;
- Administering an EpiPen® for anaphylaxis; and
- Diabetes maintenance and administering Glucagon®

Module VIII: Storage and Disposal of Medication

- Storage of medication; and
- Disposal of medication.

MODULE I: LEGAL RESPONSIBILITIES, ADMINISTRATION OF MEDICATION, AND THE "SIX RIGHTS" OF MEDICATION

A. Legal and Ethical Responsibilities

Many children enrolled in child care programs require medication while away from home. The number of children with complex health conditions is increasing. You should be familiar with both applicable federal and state laws and state child care licensing regulations for administering medications to children in early care and education settings. When administering medications, you are legally responsible for making sure medications are properly labeled and in the original containers. An understanding of federal and state laws and Office of Child Care Licensing (OCCL) regulations is necessary to reduce the potential liability issues of medication administration in the child care setting.

Delaware code permits OCCL to allow adults working in child care facilities to administer medication to children after successful completion of the approved medication certification test. When administering medication, OCCL expects you to act in a manner that protects the child from harm. A basic understanding of the medication that you are giving is important to the child's overall well-being. Therefore, you must receive the required information regarding a medication to carry out your role in the safest manner.

The Americans with Disabilities Act (ADA) is a federal law that allows a child with special health care needs to have reasonable accommodations so they can be included in early care and education settings. Early learning professionals play a key role in allowing children who are not acutely ill to attend child care outside the home, as required by ADA.

OCCL expects from both a legal and ethical standpoint that you will not knowingly participate in practices that are outside of your legally permissible role or that may endanger the well-being of the child.

B. Administration of Medication by Child Care Providers

In addition to becoming certified to administer medication, you as the child care provider, by law, must meet two other conditions before giving medication:

1. A parent/guardian must complete the OCCL Medication Administration Record (MAR) for each prescription and non-prescription medication that you are to give the child. This will give you the child's name, the name of the medication, the proper dosage, the time(s) the medication is to be given, and the route by which the medication is to be given.
2. By federal and state law and regulation, all prescription and non-prescription medication must be in its original container with a label that contains all necessary information, including the instructions for how to give it.

A school-aged child may self-administered medication with written permission from his or her parent/guardian and his/her health care provider's authorization. This authorization must be completed by the health care provider, signed by the parent/guardian, and on file with the MAR. This authorization must be renewed annually and as needed. Reviews and changes shall be written, dated, and signed by the parent/guardian and health care provider. The documentation from the health care provider must state the child is able to complete the following:

- Safely self-administer the prescribed medication;
- Identify and select the correct medication and dosage, if applicable; and
- Administer the medication at the correct time and frequency.

The medication may not be shared with any other children. Self-administration of medication must be recorded on the MAR. If the child uses the medication inappropriately or more often than prescribed, the parent/guardian must be notified immediately.

C. "Six Rights" of Medication Administration

You must be certain you are giving the right medication to the right child in the right amount at the right time using the right route and have the right documentation. Each time you give a medication, you must carefully check your procedure against these six rights:

1. RIGHT CHILD: Confirm you have the right child. If you are not certain you have the right child, STOP. Seek help from another staff member who is familiar with the child or call the parent/guardian.
2. RIGHT MEDICATION**:** Compare the MAR with the pharmacy/packaging label and make sure they match.
3. RIGHT DOSAGE: Compare the MAR and pharmacy/packaging label to make sure they list the same dosage. Carefully measure or count the correct dosage AND compare this amount with the pharmacy/packaging label.
4. RIGHT TIME: Check the label on the medication container and follow the MAR. When prescribing a medication, the health care provider will list how often the child is to take the medication.
5. RIGHT ROUTE: Read the label on the medication and compare it to the MAR. The following are routes of administration:

- Oral – by mouth
- Topical – placed directly on the skin
- Otic – ear drops placed into ear canal
- Nasal – nose drops/spray dropped or sprayed into the nostril
- Optic – placed in the eye
- Inhalation – using a nebulizer or inhaler
- Injection – using a syringe, pen, or electronic infusion device
- Rectal – inserted into rectum

6. RIGHT DOCUMENTATION: Document when each medication is given. It provides communication between individuals who care for children. The MAR is a legal document that verifies whether or not someone administered a medication(s). (Remember, if a medication has been given but not documented, there is a potential for overdosing.)

MODULE II: CLASSIFICATION AND USE OF MEDICATION

A. Classification of Medication

1. Prescription Medication

This group includes all medications that a qualified health care provider must order and only a health care provider or pharmacist provides. A health care provider prescribes a prescription drug to treat one person for a specific condition. It is very important that medications are:

- Kept in a storage area inaccessible to children; and
- Returned to the parent/guardian for proper disposal.

2. Non-Prescription Medication

Non-prescription medication is also called "over-the-counter" (OTC) medication. People can purchase OTC medication without a prescription. Common OTC medications include diaper cream, sunscreen, pain relievers which include acetaminophen such as Tylenol® or ibuprofen such as Advil® and Motrin®, and certain cold remedies like Dimetapp®, and Robitussin®. OTC medication is to be used for specific reasons. The label lists the symptoms that the medication was designed to treat. Guidance from a doctor is a good idea, but not required when using OTC medication.

B. Using, Misusing, and Abusing Medication

1. Using medication is appropriate when:

- The health care provider has prescribed the medication for the person taking it.
- The person takes the correct amount prescribed by the health care provider, or as directed by the label for OTC medication.
- The person takes the medication at the proper times for the number of days shown on the label.
- The right child receives the right medicine at the right time in the right dose by the right route and then the child care provider correctly documents this information.

2. Misusing medication occurs when:

- A person takes medication prescribed for someone else.
- A person changes the amount of the medication dosage.

- A person does not take the medication at the correct time(s) or for the length of time required.
- A person keeps unused medications beyond the expiration date for "future" use.
- A child does not take the medication as prescribed by a health care provider because the child care provider violated at least one of the "Six Rights" of Medication Administration.

3. Abuse of medication occurs when:

- A person gets prescriptions from several different doctors for the same false symptoms.
- A person intentionally takes medication to such an extent that he/she is unable to function and has strange behavior.
- A person takes medication repeatedly to experience effects that are not those intended by the health care provider.

MODULE III: PREPARATION FOR ADMINISTRATION OF MEDICATION

A. Requirements

Before being able to give medication, the following information must be available:

1. There must be written parent/guardian permission to give the specific medication. This written permission must be in the form of a signed Medication Administration Record (MAR). Parent/Guardian permission in any other form is not acceptable.
2. The prescription medication label must be clear, with proper directions, and list the name of the child receiving the prescription. The medication must be in its original container.
3. In the case of over-the-counter (OTC) medication, the label must be clear so that directions for use, dosage, and storage are readable. When a parent requests an OTC medication be used for a child under two years old, but the medication is not to be used for this age group**,** a health care provider's note explaining the amount to give and how often to give medication must accompany the container.

B. Properly Labeled Prescription

The prescription is a written order from the doctor to the pharmacist. The pharmacist provides the medication in a container that has a pharmacy label. The label should contain at least as much information as the doctor's prescription.

Below are examples of a proper pharmacy label and an explanation of the information on the label:

Line 1	Pharmacy's Phone Number, Name, and Address
Line 2	Name of the person for whom the medication is intended and date prescribed
Line 3	Name of medication, strength of each capsule, and number of capsules in the container
Line 4	Directions for taking the medication
Line 5	Prescription number and the health care provider's name
Line 6	Number of times a person may renew the medication without a new prescription
Line 7	Expiration date: (It is unsafe to take some medications after a certain time. If the medication has an expiration date, it should appear on the pharmacy label.)

Line 1	432-7107	My Pharmacy	732 S. Ocean Street Town, Delaware 19XXX
Line 2	Tim Potter		04/01/2018
Line 3	Ampicillin	250 Mg	#24
Line 4	Take one (1) capsule four (4) times a day		
Line 5	RX 2284593		Dr. T. Berry
Line 6	Refills Remaining: 0		
Line 7	Exp. Date: 04/01/2019		

C. When Not To Administer Medication

Do not administer medication if:

- The MAR containing the parent/guardian permission or a readable pharmacy label is missing;
- The child showed a dramatic change in attitude and/or behavior when given the medication before; or
- You have any doubt that you have the right child, right medication, right dosage, right time, or right route. Get assistance from another staff member, if applicable, or call the parent/guardian before giving the medication.

If a child has difficulty taking the medication, such as swallowing a large pill, check with the parent/guardian for administration techniques specific to that child's needs. If you do not administer the medication, immediately notify a parent/guardian, explain why you made this decision, and document it on the MAR.

D. Refusal of Medication

In some instances the child care provider may be unable to administer medication because the child refused the medication. Refusal of medication is not considered a medication error. It should be documented on the MAR as "refused medication" to document the reason the medication was not given. When a child refuses medication, the parent/guardian should be notified immediately.

E. Proper Measuring of Medication

When giving medication, especially liquid, use an accurate measuring device. Use the measuring device provided with the medication. Be accurate, measure liquid medicine at eye level, and never guess at the dose.

Check the markings carefully on the measuring device. Most liquid medication is measured by teaspoon (tsp) or milliliter (mL).

2.5 mL	=	½ teaspoon (tsp. or t.)		
5 mL	=	1 tsp.		
15 mL	=	3 tsp.	=	1 tablespoon (tbl. or Tbsp. or T.)
30 mL	=	2 Tbsp.	=	1 fluid ounce (oz.)

Some of the more common measurements to be aware of include:

2 Tbsp.	=	1 fluid oz.
1 Tbsp.	=	½ fluid oz.
1 tsp.	=	⅓ Tbsp.

Prescription labels are written in a manner that is easy to understand, such as "take one teaspoon every four hours," or "take one capsule daily."

DO NOT USE kitchen tableware instead of an accurate measuring device. An error in measuring liquid medication can result in the wrong dose – either too much or too little of the medication. For example, a large kitchen spoon can hold twice as much liquid as a small kitchen spoon.

MODULE IV: MEDICATION ADMINISTRATION PROCEDURES

A. General Procedures for Medication Administration

1. Before Administering

   Before administering any medication to a child, always wash your hands with soap and water. If the child will touch the medication, he/she must also wash his/her hands.

   When you give the child a medication, you become responsible for following the "Six Rights" of Medication Administration. They are the following:

   - The right medication;
   - To the right child;
   - At the right time;
   - In the right dose;
   - By the right route; and
   - With the right documentation.

This means you are responsible for the following information:

Responsibilities Before Administering Medication
• Know the time the child is to take each medication.
• Check the medication label to: o Make sure you have the right medication to give at the right time; o Make yourself familiar with how the child takes the medication (for example, is it a pill? a lotion to be applied? ear drops? etc.); o Note any special instructions for using it (for example, "take with milk" or "shake well before using"); and o Determine the correct dosage.
• Give the right medication to the right child using the proper equipment. (This may include a cup, spoon, drink of water, dropper, etc.).
• Measure and administer medication at the right time by the right route. (This may be by mouth, application to skin, in eye or nose, etc.).
• Return the closed medication container to the proper storage area that is inaccessible to children.
• Document the date and time you gave the medication. Document any medication errors and any adverse effects to the child.

2. The Timing of Dosage

   Sometimes a medication label will not state the time to take the medication. The label may simply say, for example, "*Take three times a day*." To find out the time to give a medication ordered in this manner, ask the parent/guardian with the child took the last dose and when the child should receive the next dose.

4 times a day = 6 hours between doses
3 times a day = At meal times (check the label to see if the medication should be taken before, after, or with the meal
2 times a day = On waking and at bedtime

3. Field Trips

   If a child is attending a field trip during a scheduled medication time, a child care provider with a valid Administration of Medication certificate may administer the medication while on the field trip. Medication should not be removed from the original packaging. The child care provider may request that the parent/guardian send a separate bottle with only the amount required for the day of the field trip. The child care provider must use the Medication Administration Record (MAR) to document that the child was given his/her medication at the time it was given.

A. Specific Procedures of Medication Administration

1. Oral Medication Administration

   - Follow the "Six Rights" of Medication Administration.

Oral medications include solids such as tablets and capsules. These should not be crushed without written instruction from the medical professional. Tablets come in the following forms:

- Regular tablets – taken with liquid and swallowed
- Chewable tablets – should be chewed before being swallowed
- Coated tablets – coated so they dissolve in the small intestine and should not be split or crushed
- Sublingual tablets – placed under the tongue and allow to dissolve and be absorbed
- Buccal medication – placed inside the cheek and along the gum line to be dissolved and be absorbed

Oral medication can be liquids such as syrups, elixirs, and suspensions:

- Syrups and elixirs – translucent liquid
- Suspensions – not clear liquids; contain medication that does not dissolve completely and usually requires refrigeration. Because they can separate they always need to be shaken for 15 seconds before administering.

Oral medications should always be given with four to six ounces of water to allow for easy swallowing.

- Verify the child has swallowed the medication;
- Document that you have administered the medication on the MAR;
- Put the medication back into the storage area; and
- Observe the child for any adverse medication reactions.

2. Liquid Medication Administration

   - Follow the "Six Rights" of Medication Administration;
   - Have the container at eye level;
   - Hold the bottle so the label is in the palm of the hand, pour the liquid into a marked plastic medication cup or measure using the provided syringe or dropper. Make sure the dosage is accurate;
   - Verify the child has swallowed the medication;
   - Document that you have administered the medication on the MAR;
   - Put the medication back into the storage area; and
   - Observe the child for any adverse medication reactions.

3. Eye Drop or Eye Ointment Administration
   - Follow the "Six Rights" of Medication Administration;
   - Know which eye is to be treated; O.D. = right eye, O.S. = left eye, O.U. = both eyes;
   - Stabilize the child's head by having the child tilt his/her head backward or lie down;
   - Have the child look upward;
   - Place drops into the eye by gently pulling down the skin beneath the lower eyelid and gently placing the drops into the space between the lower eyelid and the eye. Have the child blink several times. Do not allow the bottle tip to touch the eye or eyelid;
   - Have the child close his/her eyes for a few moments;
   - Dab around the eye with a tissue to remove excess medication;
   - Document that you have administered the medication on the MAR;
   - Put the medication back into the storage area; and
   - Observe the child for any adverse medication reaction.

4. Ear Drop Administration
   - Follow the "Six Rights" of Medication Administration;
   - Loosen the lid on the medication and squeeze the rubber stopper to fill the dropper;
   - Stabilize the child's head by tilting it toward the opposite shoulder and turn head to side;
   - Gently pull the top of the ear (cartilage) back and up and hold;
   - Place the prescribed number of drops into ear canal without touching the dropper to the ear;
   - Have the child remain in the same position for a few minutes to avoid leakage;
   - Document that you have administered the medication on the MAR;
   - Put the medication back into the storage area; and
   - Observe the child for any adverse medication reactions.

5. Topical Ointment or Cream Administration
   - Follow the "Six Rights" of Medication Administration;
   - Put on gloves;
   - Loosen cap on medication and squeeze recommended amount onto a cotton applicator (Q-Tip);
   - Apply the ointment directly to the area;
   - Cover area if indicated;
   - Remove gloves;
   - Document that you have administered the medication on the MAR;
   - Put the medication back into the storage area; and
   - Observe the child for any adverse medication reactions.

6. Nasal Spray Administration
   - Follow the "Six Rights" of Medication Administration;
   - Have the child blow his/her nose;
   - Have the child block one nostril with a finger;

- Insert the nozzle of the medication into the other nostril;
- Aim so that the spray is directed upward and toward the center of the nostril;
- Instruct the child to exhale;
- Squeeze the medication quickly and firmly, then have the child inhale;
- Repeat if required for the other nostril;
- Document that you have administered the medication on the MAR;
- Put the medication back into the storage area; and
- Observe the child for any adverse medication reactions.

7. Metered Dose Inhaler Administration

- Follow the "Six Rights" of Medication Administration;
- Shake the inhaler several times;
- Check that the canister is firmly positioned in the plastic holder;
- Have the child slightly tilt his/her head backward;
- Have the child breath out completely;
- Have the child place the mouthpiece between the teeth and close lips around it;
- Squeeze inhaler to discharge the medicine and have the child begin to inhale immediately;
- Instruct child to breathe in slowly and deeply for 3-5 seconds. Once inhaled, have child remove inhaler from mouth, have child hold his/her breath for 5-10 seconds then exhale;
- Rest for a minute, then repeat this sequence for the number of prescribed puffs;
- Document that you have administered the medication on the MAR;
- Put the medication back into the storage area; and
- Observe the child for any adverse medication reactions.

B. Medication Techniques for Infants/Toddlers

Assisting with medications in very young children may be difficult and will require special methods. You may use the following techniques to help give infants medication:

- Young Infant: Place the measured medication in an empty nipple and allow the infant to suck it out.
- Older Infant: Place the medication in a small cup or measuring spoon. Hold the infant firmly; hold the infant's hands so the infant does not push the medication out of your hand. Gently pour the medication into the child's mouth.

Never put the medication in a bottle. There is no way to be certain the child will take all the medication and there is always the danger the child will refuse to drink this and other fluids.

- Toddler (1-3 years): Never ask if the toddler wants to take medication now. You may get a "no" response and if you proceed to give the medication anyway, you will lose the toddler's trust. If the child is unable to handle a cup well, use the same process as with the older infant. If the child can handle a cup easily, pour the medication into a small cup, and allow the child to drink the medication with supervision. Pills used for this age group are usually in chewable form. Stay with the child to make sure the child chewed and swallowed the pill.

MODULE V: MEDICATION ADMINISTRATION RECORD (MAR) DOCUMENTATION, MEDICATION ERRORS, AND AVOIDING MEDICATION ERRORS

A. Documentation on the Medication Administration Record (MAR)

When you give a child medication, it is necessary to document the time and dosage. This is especially important if you share the responsibility of giving medication with another person in your facility, if more than one child is receiving medication, or if someone other than yourself is sharing medication information with parents/guardians at the end of the day. Additionally, it is essential in terms of your liability, to keep records of medication you have administered. You are required to keep this information on a MAR.

The MAR is a legal document that shows the medication that someone administered. There are two types of MARs. One record is for medications that are used routinely or for a limited time. The other one is for medications that are given as needed or used for emergencies.

The record should include the following documentation:

Documentation Required on the MAR
• The medication name, dosage, route, reason, date to start medication, date to end medication (if known), and special instructions for each medication the child is to take during the day;
• The child's name and date of birth;
• The date and time the medication was administered;
• The initials and name of the person who administered the medication;
• If the child refused to take the medication;
• Any change that is different from the child's normal condition; and

• If a medication error occurred:
  o Document the error in the medication error section; and
  o Write your initials and circle them in the space where you should have documented the medication administration.

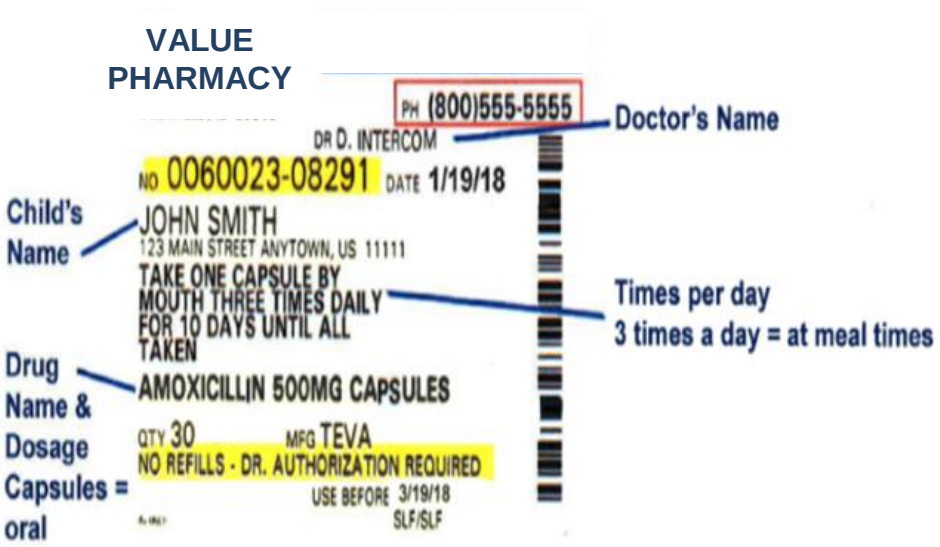
Do:

- Give your full attention to the task;
- Check the name of the child and date of birth on the MAR;
- Prepare medication for only one child at a time;
- Remain with the child until you are sure the medication has been taken; and
- Record giving the medication on the MAR neatly and accurately; use non-erasable ink (black preferred).

Do not:

- Use pencils;
- Erase entries;
- Use white-out;
- Scribble out entries;
- Leave blank spaces; or
- Destroy or alter any part of the MAR.

EXAMPLE OF COMPLETED MAR USING A PRESCRIPTION LABEL



MEDICATION ADMINISTRATION RECORD (MAR)
(FOR MEDICATIONS GIVEN ROUTINELY OR FOR A LIMITED TIME)

CHILD'S NAME: John Smith DOB: 1/22/13 ALLERGIES: Eggs
PARENT'S/GUARDIAN'S NAME: Mary Smith DOCTOR: D. Intercom TELEPHONE: (302) 123-4567
MONTH AND YEAR: January, 2019

MEDICATION INFO	TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MEDICATION NAME:	8:30																						IL	PJ	IL	PJ	IL			IL		
Amoxicillin	12:30																						PJ	PJ	IL	IL	PJ			IL		
DOSAGE: 500 MG																																
ROUTE: Oral																																
REASON: Ear Infection																																
START DATE: 1/22/19																																
END DATE: 1/29/19																																
SPECIAL INSTRUCTIONS: Give with food																																

I, Mary Smith, the parent/guardian of the above listed child, give permission for the above medication to be administered.

Mary Smith
Signature

1/23/19
Date

DATE:	TIME:	COMMENTS/MEDICATION ERRORS/ADVERSE EFFECTS:	DATE AND TIME PARENT/GUARDIAN WAS INFORMED OF ERRORS OR ADVERSE EFFECTS
1/23/2019	12:30 p.m.	John received medication at 12:45 p.m. because he was not ready to eat and the medication requires being taken with food.	Mom was called at 12:46 p.m. and notified

NAME OF PERSON ADMINISTERING	INITIALS	ROUTE OF ADMINISTRATION; SELECT ONE
Patty Jones	PJ	ORAL *(BY MOUTH)*
Ian Long	IL	EYE DROPS *(OPTIC)*
		NOSE DROPS/SPRAY *(NASAL)*
		EAR DROPS *(OTIC)*
		TOPICAL *(ON SKIN)*
		INHALATION *(NEBULIZER)*
		INJECTION *(SYRINGE, PEN, OR ELECTRONIC INFUSION DEVICE)*
		RECTAL

EXAMPLE USING THE MAR FOR A MEDICATION FOR USE AS NEEDED

MEDICATION ADMINISTRATION RECORD (MAR)
(FOR MEDICATIONS GIVEN AS NEEDED OR FOR EMERGENCY USE)

CHILD'S NAME: John Smith DOB: 1/22/13 ALLERGIES: Eggs
PARENT'S/GUARDIAN'S NAME: Mary Smith DOCTOR: D. Intercom TELEPHONE: (302) 123-4567

MEDICATION INFO	TIME:	DATE:	NAME OF PERSON ADMINISTERING:	ROUTE OF ADMINISTRATION; SELECT ONE
MEDICATION NAME: Benadryl Anti-Itch Gel	3:00 p.m.	5/17/18	Shelly Smith	ORAL *(BY MOUTH)*
DOSAGE: Enough to cover area				EYE DROPS *(OPTIC)*
ROUTE: Topical				NOSE DROPS/SPRAY *(NASAL)*
REASON: Itchy skin				EAR DROPS *(OTIC)*
START DATE: 4/16/18				TOPICAL *(ON SKIN)*
SPECIAL INSTRUCTIONS: For reaction to bug bites				INHALATION *(NEBULIZER)*
				INJECTION *(SYRINGE, PEN, OR ELECTRONIC INFUSION DEVICE)*
				RECTAL
				Dates and times of sunscreen, diaper cream, and insect repellent applications do not need to be documented. However, all other information and parent permission for these medications are required on the MAR.

I, Mary Smith, the parent/guardian of the above listed child, give permission for the above medication to be administered.

Mary Smith
Signature

4/16/18
Date

DATE:	TIME:	COMMENTS/MEDICATION ERRORS/ADVERSE EFFECTS:	DATE AND TIME PARENT/GUARDIAN INFORMED OF ERRORS OR ADVERSE EFFECTS

OTC medications are widely used and can range from acetaminophen such as Tylenol® to sunscreen. OTC medications should be documented and safely stored the same as prescription medications.

Exceptions to this rule are sunscreens, diaper rash creams, insect repellants, and medicated powders. Parent's/Guardian's permission is required on a MAR; however, you do not need to document on the MAR each time you apply these topical ointments/creams/powders.

The MAR for routinely used medications is located in Appendix II. The MAR for medications used as needed or for emergencies is located in Appendix III.

B. Medication Errors

Preventing errors begins with good communication about medication use between the child's family and staff both at drop-off and pick-up. More importantly, clear communication between staff members is critical whenever supervision of a child requiring medication administration transfers from one staff member to another. Both verbal and written communication help prevent errors in medication administration. The first dose of any new medication should be given at home. A medication error occurs when you violate any of the "Six Rights" of Medication Administration. A medication error has occurred if:

- The child took the wrong medication;
- The child took the wrong dose;
- The child took the medication at the wrong time or the medication was not taken at all;
- The medication was taken by the wrong route;
- The medication was given to the wrong child; or
- The medication was given without documenting it.

If a medication error occurs, you must:

- Call 9-1-1, if the child's health is in jeopardy;
- **Immediately call** the child's parent/guardian. Tell the parent/guardian:

WHAT	***What type of error was made***
WHEN	***When the error occurred***

- **If you cannot reach the parent/guardian**, call the prescribing health care provider or the Poison Control Center and provide them with the name and dosage of the medication taken in error, the child's age and approximate weight, and the name and dosage of any other medication that the child receives;
- Follow the instructions of the health care provider or Poison Control Center to determine if the child requires emergency care;
- Keep the child in the area designated for sick children;
- Observe the child and document any adverse reactions or concerns;
- Notify the administrator or owner of the child care program, if applicable;
- Report all medication errors that result in the child needing medical attention to OCCL within one business day by calling and speaking to someone. Avoiding or choosing not to report and document errors could lead to a serious injury or death of a child and violates DELACARE Regulations and your ethical responsibilities when giving medication; and
- Complete an incident form that includes all actions taken after the medication error. Send a copy of this form to OCCL within three business days (See Appendix I).

C. Avoiding Medication Errors

In addition to the "Six Rights" of Medication Administration, there are some additional safeguards to help reduce medication risks.

Always check the medication label when:

- Removing the medication from storage; and
- Removing the medication from its container.

Do:

- Give your full attention to the task;
- Remain with the child until you are sure the child took the entire medication; and
- Prepare and administer medication to only one child at a time.

Do not:

- Administer medication prepared by another person;
- Take medication from a container that has an unreadable label; and
- Try to hide a medication error.

It is very important to check the medication label many times during the above process to ensure you follow the "Six Rights" of Medication Administration.

MODULE VI: MEDICATION EFFECTS

A. Three Basic Effects of Major Medication Groups

For each child's protection and safety, it is important for you to notice the effect the medication has on the child. You can find the length of time between taking a medication and its onset of action by using a medication handbook or asking the pharmacist. Each medication has a different time for onset of action. Always look for the onset of action and take the time to notice the effect of the medication.

A medication, when taken, can have three basic effects:

- No effect;
- Desired effect; or
- Undesired effect.

Examples:

- A person may be taking cough syrup for a cough, yet after a half-hour, there is no improvement in the cough. This is an example of a medication having no effect.
- A person may take two Tylenol® for a headache and within the hour, the headache is gone. This is an example of a medication having a desired effect.
- A person may be taking penicillin for a strep throat. An hour after taking the medication, the person may notice a very itchy rash developing. This is an example of a medication having an undesired effect.

In order to determine what effect the medication is having on a child, you must first be familiar with the desired effect of the medication.

Medication for children may be divided into five basic groups. Each group of medications has a different effect on the child:

- Heart medications – are used to slow down or change the heart's function and may cause palpitations, headache, or upset stomach. (Example: Digoxin®)
- Anticonvulsants – are used for seizure disorders and may cause drowsiness. (Example: Phenobarbital®)
- Antibiotics – are used to fight infection and may cause allergic reactions. (Example: amoxicillin or penicillin)
- Analgesics – are used to reduce fever or pain and may cause upset stomach. (Example: ibuprofen such as Advil® or Motrin® or acetaminophen such as Tylenol®)
- Mood-changing medicines – may cause drowsiness or over activity. (Example: Valium® or Ritalin®)

B. The Adverse Effects of Medication

The child in question has a sore throat and has already missed one day in care because of this. He is now taking penicillin – 1 teaspoon, four times a day. About 15 minutes after his noon dose, you notice him scratching. A rash has developed on his face, neck, and arms. It is getting harder for him to breathe. How would you react?

This is an example of an extreme medication reaction. Many times, seemingly harmless medications have an adverse reaction in sensitive people.

ALWAYS take the time to notice the effect of the medication the child has taken.

When a reaction is severe enough to threaten the child's life, as in the above example where it has affected breathing, call for help by dialing 9-1-1. After calling for help, notify the child's parent/guardian.

How do you respond when you notice a child is having an adverse reaction to a medication?

1. STOP giving the medication.
2. CALL and inform the parent/guardian of the child's reaction.
3. If he/she is unavailable, call the prescribing health care provider, and the child's emergency contact.

How do you know if what you are seeing is a medication reaction?

KNOW about the medication before you give the medication to the child. It is important to be familiar with any medication that is being administered. Find the medication information by checking the package inserts that come with the medication, calling your local pharmacist, or checking the official medication company's website. Read the medication information to know what adverse reaction symptoms to look for.

The adverse effect of medications can also be found in a current medication handbook. These handbooks are updated on an annual basis and contain the most current information on newly developed medications to include recommended dosages; what diagnosis or symptom the medication treats; how the medication is absorbed; and most importantly the potential side effects/adverse effects of the medication. Medication information is also available online at the:

National Institute of Health's website Medline Plus:
http://nlm.nih.gov/medlineplus/druginformation.html

If you are unsure if what you are seeing is an adverse reaction, call the prescribing health care provider or local pharmacy for help.

MODULE VII: EMERGENCY-USE MEDICATIONS

A. Administering Diastat® for Seizures

You may administer emergency medications through a child's rectum. A common medication that is administered rectally is Diazepam (Diastat®). You must know how to administer this medication BEFORE a child needs it. You must have a parent/guardian train you on administration of these medications.

- Diastat® is an emergency medication inserted rectally for seizure control. The parent/guardian must provide written instructions and training to the child care provider stating the conditions under which the medication should be given, how to give the medication, and follow-up requirements. **If you administer Diastat®, you must administer the medication first, and then immediately call 9-1-1 and notify the child's parent/guardian that the medication was given. If someone else is present, while you administer the medication, have him or her call 9-1-1 immediately and then call the child's parent/guardian.**

Epilepsy is a neurological disorder that causes a child to have recurrent seizures. Seizures are caused by a brief disruption in the brain's electrical activity resulting in altered or loss of awareness, shaking, convulsing, confusion, or sensory experiences. Seizures may last for a few seconds to a few minutes. Most seizures are not medical emergencies. There are several kinds of seizures. Discuss the child's type of seizures with the parent/guardian.

Common types of seizures include:

- Generalized Tonic Clonic (Grand Mal) – convulsions, muscle rigidity, jerking;
- Absence (Petit Mal) – blank stare lasting only a few seconds, sometimes accompanied by blinking or chewing motions;
- Complex Partial (Psychomotor/Temporal Lobe) – random activity where the child is out of touch with his/her surroundings;
- Simple Partial – jerking in one or more parts of the body or sensory distortions that may or may not be obvious to onlookers;
- Atonic (Drop Attacks) – sudden collapse with recovery within a minute; and
- Myoclonic – sudden, brief, massive jerks involving all or part of the body.

Time the seizure from beginning to end. During the seizure, turn the child to one side, clear the area surrounding the child, and make sure the child's airway is open. Do not place an object into the child's mouth. Do not attempt to restrain or hold down the child. **It is important for children who receive seizure medication to have a written Seizure Emergency Action Plan of Care that outlines when emergency medication should be given. The expiration date of the Diastat® should be checked monthly and the parent/guardian notified prior to the expiration date.**

A seizure is generally considered an emergency under the following conditions:

- Convulsive (Tonic-Clonic) seizure lasts longer than five minutes;
- The child has repeated seizures without regaining consciousness;
- The child is injured or has diabetes;
- The child has a first-time seizure; or
- The child has difficulty breathing.

How to Administer Diastat® AcuDial (Diazepam rectal gel)

Important: Check the required dose when receiving Diastat® from a parent/guardian

- Diastat® AcuDial™ has a unique locking mechanism that ensures that the child receives the correct dose. ALWAYS make sure the green "READY" is visible. If you do not see the green "READY" band, the medication is not properly locked in. **Do not accept the prescription** and have the parent/guardian contact the pharmacist and return the Diastat® to the pharmacy immediately. **Do not administer Diastat® that does not have the correct dose properly locked in. If you are required to use Diastat®, you inject the medication into the rectum and then immediately call 9-1-1 for assistance and contact the parent/guardian. If someone else is present, while you administer the medication, have him or her call 9-1-1 immediately and then call the child's parent/guardian.**

Administration Procedures

- ~~Identify someone to call 9-1-1 immediately and the parent/guardian~~ If you are alone follow these steps and then immediately call 9-1-1 and the child's parent/guardian. If someone else is present, have him or her contact 9-1-1 and the child's parent/guardian;
- Turn child on side where he/she can't fall;
- Put on gloves;
- Remove medication (syringe) from container; (Note: seal pin is attached to the cap)
- Push up with thumb and pull to remove protective cap from syringe tip (Be sure seal pin is removed with the cap);
- Lubricate rectal area with lubricating jelly from kit;
- Turn child on side facing you and lower clothing;
- Bend upper leg forward to expose rectum;
- Separate buttocks to expose rectum;
- Gently insert lubricated syringe tip into rectum (Rim of syringe should be against rectal opening);
- Slowly count to three while gently pushing plunger until it stops;
- Slowly count to three before removing syringe from rectum;
- Slowly count to three while holding buttocks together to prevent leakage;
- Keep child on his/her side, note the time Diastat® was given, continue to observe until emergency medical services (EMS) arrive;
- Give EMS the used Diastat® syringe (Note: recap the syringe); and
- Document the administration of Diastat® on the child's MAR.

B. Administering an EpiPen® for Anaphylaxis

In an emergency situation you may administer an EpiPen®.

- An EpiPen® is a medical device that serves as an auto-injector for epinephrine. Health care providers often prescribe an EpiPen® to children who have survived a life-threatening allergic reaction. If a child in your care has an EpiPen®, you should become familiar with the instructions on the kit in case the child is exposed to a specific allergen. **If you are required to use the EpiPen®, you inject the medication and then immediately call 9-1-1 for assistance and contact parents/guardians. If someone else is present, while you administer the medication, have him or her call 9-1-1 immediately and then call the child's parent/guardian.**
- Even if the EpiPen® has been effective, transport the child to an emergency room for evaluation and treatment.

Symptoms of anaphylaxis include:

- Itching and/or hives, particularly in the mouth or throat;
- Swelling of the throat, lips, tongue, and/or eye area;
- Difficulty breathing, swallowing, or speaking;
- Increased heart rate and/or sense of impending doom;
- Abdominal cramps, nausea, vomiting, and/or diarrhea; and
- Weakness, collapse, paleness, lightheadedness, or loss of consciousness.

It is important for children with severe allergies who are at risk of anaphylaxis to have a written Allergy or Anaphylaxis Emergency Action Plan of Care that outlines when medication should be given. The expiration date of the EpiPen® should be check monthly and the parent/guardian notified prior to the expiration date. An EpiPen® should be stored at room temperature in a dark area.

How to Administer an EpiPen®

- ~~Identify someone to call 9-1-1 and the parent/guardian;~~ If you are alone follow these steps and then immediately call 9-1-1 and the child's parent/guardian. If someone else is present, have him or her contact 9-1-1 and the child's parent/guardian;
- Flip open cap at top of tube;
- Remove EpiPen® from carrier tube and remove the blue safety release;
- Form a fist around the unit with orange tip pointing downward;
- Swing and firmly push orange tip against outer thigh until click is heard. (Auto-injector may be given through clothing);
- **Hold in place for 10 seconds**. The injection is now complete;
- Remove pen from thigh and massage injection site for10 seconds;
- Place used auto-injector into carrier tube and give to emergency medical services (EMS) when they arrive; and
- Document administration of EpiPen® on MAR.

  Note: Always refer to the package insert for additional information on administration.

C. Diabetes Maintenance and Administering Glucagon®

It is important for children who receive insulin for treatment of diabetes to have a written Emergency Diabetes Action Plan of Care completed and signed by the parent/guardian and the health care provider. This plan is in addition to the Medication Administration Record (MAR) and outlines how glucose is monitored, when medication should be given, and includes additional information related to the specific care required for the child. When a child with diabetes will be taken off site for a field trip, for example, child care staff must bring necessary supplies, medications, and snacks as described in the child's Diabetes Action Plan of Care.

1. Glucose Monitoring

   Child care providers are permitted to provide glucose monitoring to children with diabetes by piercing the skin with a lancet (typically on the finger) to draw blood, then applying the blood to a chemically active disposable "test-strip." Lancets must be disposed of according to biohazard regulations or collected in a hard plastic container and returned to the parent/guardian for disposal. Before lancets are used to monitor glucose at the child care facility, the child care providers must be trained by a qualified instructor which can include parents/guardians.

   Continuous Glucose Monitors (CGMS) provide real-time glucose data on a visual display in five-minute intervals for earlier identification of low glucose. CGMS alarms alert the user when glucose levels are above or below a pre-programed target range. Child care providers should be prepared to respond and provide assistance. Before the CGMS is used at the child care facility, the child care providers must be trained to use the CGMS by a qualified instructor which can include parents/guardians. If the monitor is not properly attached to the child's skin, immediately call the parent/guardian.

2. Insulin Pump

   An insulin pump is a device that allows the user to enter required information to make sure the child is receiving the proper amount of insulin. Before the insulin pump is used at the child care facility, the child care providers must be trained to use the insulin pump by a qualified instructor which can include parents/guardians. If the pump's catheter comes out of the child's skin, immediately call the parent/guardian. Child care providers may not insert catheters.

3. Insulin Injections

   Child care providers may administer insulin injections to children with diabetes if the provider has a valid Administration of Medication certificate and the additional training specified by the child's health care provider that explains how to properly administer insulin injections. Child care providers must keep this documentation with the MAR. Information regarding insulin dosages will be provided by the child's health care provider and must be appropriate to the child's Diabetes Action Plan of Care.

4. Glucagon®

   Glucagon® is an emergency medication used to treat severe low blood sugar (hypoglycemia) by increasing blood glucose levels. Due to its emergency nature, it may be given by injection by a child care provider. The parent/guardian must provide written instructions and training to the provider stating the conditions under which the medication should be given, how to give the medication, and any follow-up requirements. If you administer Glucagon, you must notify the child's parent/guardian immediately that the medication was given.

   Hypoglycemia may result from:

   - Too much insulin;
   - Insulin was administered without eating;
   - Too little food consumed;
   - A delay in receiving a snack/meal;
   - Increased physical activity; or
   - Illness.

How to Administer Glucagon® for Hypoglycemia

- ~~Identify someone to call 9-1-1 and contact the parent/guardian~~ If you are alone follow these steps and then immediately call 9-1-1 and the child's parent/guardian. If someone else is present, have him or her contact 9-1-1 and the child's parent/guardian;
- Put on gloves;
- Open kit;
- Remove flip top seal from vial;
- Remove needle protector from syringe;
- Slowly inject all sterile water from syringe into vial of Glucagon® (leave needle in vial if possible);
- **Gently** shake or roll the vial to mix until solution is clear. (May leave syringe in vial);
- Withdraw amount of Glucagon® prescribed from vial back into syringe;
- Inject straight (90˚angle) into
  -arm (upper)
  -leg (thigh)
  -or buttocks
  (as directed in the physician's instructions;
  may inject through clothing if necessary);
- Slowly inject Glucagon® into site;
- Withdraw needle, apply light pressure at injection site;
- Turn child onto side, child may vomit;
- Place used needle back in kit and close lid (do not recap);
- Give used kit to EMS personnel; and
- Document administration of Glucagon® on MAR.

MODULE VIII: STORAGE AND DISPOSAL OF MEDICATION

A. Storage of Medication

For your safety and the safety of the children in your care, use the following guidelines to store medications:

- Medications are to be in their original, labeled container.
- For prescription medications, the label must include the child's name, the date the prescription was issued, and the prescribed dose.
- All medications are to be stored securely out of children's reach.

- All medications stored in a refrigerator are to be kept in a separate container, preferably a locked one.
- All medications must be stored under proper conditions of sanitation, temperature, light, and moisture.

It is strongly recommended that the key to the medicine cabinet be kept either in one specific location or with the person who is responsible for administering medication. Medications are not required to be in a locked cabinet but must be inaccessible to children.

Medications are always labeled with specific written instructions regarding special storage requirements. Always read the label carefully. Some medications require refrigeration between uses.

B. Disposal of Medication

When a prescription is no longer needed, out-of-date, or if medications are left after a child leaves care, the medications should be returned to the parent/guardian or disposed of in a safe manner, such as using a medication collection site.

APPENDIX I

SAMPLE Medication Administration Error Report Form

Child's Name: _____

Child Care Provider's Name: _____

Date and Time of Error: _____

Name of Person Administering Medication: _____

Name of Medication: _____ Dosage: _____Route:_____

Time(s) to be Given: _____

Circle all that apply to this medication error:

Wrong Child	Wrong Time	Wrong Dose
Wrong Route	Wrong Medication	Wrong Documentation

Describe the error (Should be completed by the person making the error. If wrong medication given, include the name and dosage and what was given):

_____

_____

_____

Action Taken/Intervention: _____

Person Notified at Time of Error: _____

Administrator Signature: _____ Date and Time of Notification: _____

Parent/Guardian Notified: Yes No Attempted Date and Time of Notification: _____

Child's Health Care Provider Notified: Yes/No Date/Time of Notification: _____

Name of Person Completing Error Report: _____

Signature of Person Completing Error Report: _____

Today's Date: _____

Follow-Up Care/Information (if applicable):_____

_____

APPENDIX II
MEDICATION ADMINSTRATION RECORD (MAR) INSTRUCTIONS

After each MAR is completed, keep it in the child's file. Centers may use a central administration of medication log, if preferred.

MEDICATION LOG INSTRUCTIONS	
CHILD'S NAME	Clearly print the child's first and last names.
DATE OF BIRTH	
ALLERGIES	List allergies.
PARENT'S/GUARDIAN'S NAME	
DOCTOR'S NAME & PHONE	For quick reference to gather further information
MEDICATION NAME	Name of medication
DOSAGE	Amount of medication to be given, i.e., 1 teaspoon
ROUTE	Route of administration; how will it be administered?
REASON	Why medication is needed, i.e., ear infection
START DATE	Date medication is to begin
END DATE	Date medication is to end
SPECIAL DIRECTIONS	Such as take before eating
TIME	List the time of day medication is to be given
The numbers across the top are the days of the month. The parent/guardian must sign and date the permission statement after you or the parent/guardian fills out the information section on a specific medication. Place your initials in the appropriate box according to the time and date you give each dose.	
DATE, TIME, COMMENTS/ MEDICATION ERRORS/ADVERSE EFFECTS	Space to document reactions to the medication, date, time, your response, any medication errors, and your attempts to notify the parent/guardian
NAME OF PERSON ADMINISTERING	Identifies the full name of the person(s) whose initials appear

APPENDIX II

MEDICATION ADMINISTRATION RECORD (MAR)
(FOR MEDICATIONS GIVEN ROUTINELY OR FOR A LIMITED TIME)

CHILD'S NAME: _____ DOB: _____ ALLERGIES: _____

PARENT'S/GUARDIAN'S NAME: _____ DOCTOR: _____ TELEPHONE: _____

MONTH AND YEAR: _____

MEDICATION INFO	**TIME**	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MEDICATION NAME:																																
DOSAGE:																																
ROUTE:																																
REASON:																																
START DATE:																																
END DATE:																																
SPECIAL INSTRUCTIONS:																																

I, _____, the parent/guardian of the above listed child, give permission for the above medication to be administered.

_____ _____

Signature Date

DATE:	**TIME:**	**COMMENTS/MEDICATION ERRORS/ADVERSE EFFECTS:**	**DATE AND TIME PARENT/GUARDIAN INFORMED OF ERRORS OR ADVERSE EFFECTS**

NAME OF PERSON ADMINISTERING	**INITIALS**	**ROUTE OF ADMINISTRATION; SELECT ONE**
		ORAL *(BY MOUTH)*
		EYE DROPS *(OPTIC)*
		NOSE DROPS/SPRAY *(NASAL)*
		EAR DROPS *(OTIC)*
		TOPICAL *(ON SKIN)*
		INHALATION (*NEBULIZER)*
		INJECTON (*SYRINGE, PEN, OR ELECTRONIC INFUSION DEVICE*)
		RECTAL

APPENDIX III

MEDICATION ADMINISTRATION RECORD (MAR)
(FOR MEDICATIONS GIVEN AS NEEDED OR FOR EMERGENCY USE)

CHILD'S NAME: _____ DOB: _____ ALLERGIES: _____

PARENT'S/GUARDIAN'S NAME: _____ DOCTOR: _____ TELEPHONE: _____

MEDICATION INFO		**TIME:**	**DATE:**	**NAME OF PERSON ADMINISTERING:**	**ROUTE OF ADMINISTRATION; SELECT ONE**
MEDICATION NAME:					ORAL *(BY MOUTH)*
					EYE DROPS *(OPTIC)*
DOSAGE:					NOSE DROPS/SPRAY *(NASAL)*
ROUTE:					EAR DROPS *(OTIC)*
REASON:					TOPICAL *(ON SKIN)*
START DATE:					INHALATION (*NEBULIZER)*
SPECIAL INSTRUCTIONS:					INJECTION (*SYRINGE, PEN, OR ELECTRONIC INFUSION DEVICE)*
					RECTAL

Dates and times of sunscreen, diaper cream, and insect repellent applications do not need to be documented. However, all other information <u>and parent permission</u> for these medications are required on the MAR.

I, _____, the parent/guardian of the above listed child, give permission for the above medication to be administered.

_____ _____

Signature Date

DATE:	**TIME:**	**COMMENTS/MEDICATION ERRORS/ADVERSE EFFECTS:**	**DATE AND TIME PARENT/GUARDIAN INFORMED OF ERRORS OR ADVERSE EFFECTS**