**Plano Independent School District**

**School Health**

**Metered Dose Inhaler Administrative Guideline**

**Purpose**

A metered-dose inhaler (MDI) is a piece of equipment that enables the student to breathe or inhale a fixed dose of his/her medication. A holding chamber (spacer) is usually used with an MDI to maximize the amount of medication inhaled. It enables the medication to work quickly, going directly to the student’s lungs. It is used to treat respiratory disease such as asthma.

**Definitions**

* **Action Plan** – plan developed and signed by physician outlining medication and care to be given during the school day. May be used as Individual Health Plan if no additional care is required.
* **5 Rights of Medication Administration** - the right patient, the right drug, the right dose, right route, the right time.
* **Holding Chamber** – a **valved holding chamber** is a type of spacer that includes a one-way valve at the mouthpiece. This device does more than provide “space” between the mouth and the medicine. It also traps and holds the medicine, which gives time to take a slow, deep breath. This allows for the medicine to be fully inhaled into the lungs.
* **Medication Request Form** – Plano Independent School District specific form signed by the parent giving permission for parent provided medication to be given during school and school related activities.
* **Metered dose inhaler (MDI)** – devices designed to release a premeasured amount of medication into the air. They are commonly used to deliver a number of commonly prescribed asthma medications that help open up the airways and ease breathing. They are especially important for delivering quick relief medication—short-acting beta agonists that relieve an acute asthma attack. Preventive medication can also be delivered this way.
* **Spacer** - an add-on device used to increase the ease of administering aerosolized medication from a "[metered-dose inhaler](http://en.wikipedia.org/wiki/Metered-dose_inhaler)" (MDI). The spacer adds space in the form of a tube or “chamber” between the canister of medication and the patient’s mouth, allowing the patient to inhale the medication by breathing in slowly and deeply.
* **Universal Precautions** - precautions designed to prevent transmission of blood borne pathogens such as human immunodeficiency virus, hepatitis B and other blood borne pathogens when first aid or health care is provided.

**Metered Dose Inhaler Program Coordinator**

Coordinator for District Health

**Responsibilities**

* Coordinate with Plano ISD principals and/or building manager and school nurses in the selection of employees for training.
* Coordinate appropriate devise maintenance.
* Oversee the maintenance of specifications/technical information.
* Assure quality improvement by revising this guideline as required through the monitoring of training and the effectiveness of training.
* Communicate with medical officer on issues related to metered dose inhaler.

**Environment/Setting**

There are no restrictions as to where a metered dose inhaler can be given. If metered dose inhaler will be kept in the health office, the cabinet will be well marked and kept unlocked for ease in an emergency.

**Restrictions**

Some students will have permission to self-carry and self-administer MDI. Permission to self-carry and self-administer must be given by the physician, parent and school nurse. Student must show responsible behavior with medication and proven reliability of dosage and usage in order to self-carry. If deviations in reliability or responsible behavior occur, self-carry rights will be reviewed by school nurse, parent and physician.

**Requirements**

* Parental consent to administer medication
* Consent to communicate with health care provider
* Action Plan/physician orders if applicable
* Non-expired, properly labeled prescription medication

**Applicable documents**

* Administrative Guideline
* Procedure
* Training Checklist
* Possible Problems List
* Action Plan / Individual Health Care Plan (if needed for additional information for care)

**Medical Control**

The medical advisor of the Metered Dose Inhaler administrative guideline is the Plano ISD’s medical officer. The medical officer will direct the following:

* Medical direction in the formulating the guideline.
* Review and approve the above.
* Evaluation as needed.

**Person Responsible**

Registered Nurse

Unlicensed Assistive Personnel (UAP) as trained by Registered Nurse

**Training**

* Registered Nurse is the person responsible for the training.
* Training is done yearly and as needed throughout the year.
* Competency checklist must be signed and dated yearly and periodically throughout the year as needed for verification of skills.
* Asthma Training video is available on Plano ISD Training Website.

**Procedural Guideline**

1. **Metered Dose Inhaler (MDI)**
2. Check Asthma Action Plan and Parent Request for Medication Administration Form (Pink).
3. Locate the correct medication; check the prescription label for student’s name, name of medication, dosage, and time of administration.
4. Give the prescribed/requested medication using the 5 “Rights” of Safe Medication Administration posted in the clinic and in the medication book.
5. Use Universal Precautions. Wash hands before and after performing procedure.
6. Identify and explain the procedure to the student at his/her level of understanding. Have the student do as much of the procedure as is capable of, with supervision as needed.
7. Assemble all equipment: Metered Dose Inhaler (MDI).
8. Have student standing up straight and look straight ahead.
9. Remove the plastic protective cap from the MDI.
10. Shake the MDI and prime according to instructions.
11. Have the student blow out all of the air they can.
12. Place MDI in mouth and then spray one spray.
13. Have student breathe in slowly and completely through their mouth, then hold their breath for 6 to 10 seconds.
14. Wait one minute and repeat above steps if more puffs are needed.
15. Have the student rinse his/her mouth with water and spit it out after using the inhaler.
16. Wash hands.
17. Document.
18. **Metered Dose Inhaler (MDI) with Holding Chamber**
19. Check Asthma Action Plan and Parent Request for Medication Administration Form (Pink).
20. Locate the correct medication; check the prescription label for student’s name, name of medication, dosage, and time of administration.
21. Give the prescribed/requested medication using the 5 “Rights” of Safe Medication Administration posted in the clinic and in the medication book.
22. Use universal precaution. Wash hands before and after performing procedure.
23. Identify and explain the procedure to the student at his/her level of understanding. Have the student do as much of the procedure as is capable of, with supervision as needed.
24. Assemble all equipment: Metered Dose Inhaler (MDI) and holding chamber.
25. Have student standing up straight and look straight ahead.
26. Remove the plastic cap from the MDI and the holding chamber.
27. Shake the MDI and prime according to instructions. Insert the MDI into the back of the holding chamber.
28. Have student blow out all of the air they can.
29. Place holding chamber in the student’s mouth and then spray one spray. Some students may have a mask attached to the holding chamber. Hold firmly over student’s face.
30. Have student breathe in slowly and completely through their mouth, then hold their breath for 6 to 10 seconds. If the student uses a holding chamber with a mask, hold the mask firmly on the student’s face.
31. Remove the holding chamber from the student’s face/mouth and breathe out.
32. Wait one minute and repeat above steps if more puffs are needed.
33. Have the student rinse his/her mouth with water and spit it out after using the inhaler.
34. Wipe off mouth piece/mask.
35. Wash hands.
36. Document.

**Medical Director**:

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Physician Signature/Plano ISD Medical Officer