

RESCUE THERAPIES







Antiseizure medications (ASM) used “prn” or “as needed”

- Not used in place of daily medications or emergency care
- For use by non-medical people outside of health care setting

When are they used?

- To stop cluster seizures or acute repetitive seizures
- To stop seizures lasting longer than usual
- When seizures differ from their usual type/pattern
- For breakthrough seizures during high-risk times
- To prevent emergencies

How Are Rescue Therapies Given?

Rectal	Oral	Intranasal
	<ul style="list-style-type: none">○ Sublingual○ Buccal  	  

Follow Seizure Action Plan and prescription to confirm drug, dose, and how to administer it!

Before Using a Rescue Therapy

- Know the student's typical seizure type, pattern, triggers
- Be able to recognize atypical seizures
- Be aware of a student's allergies
- **Collaborate with health care team:**
 - Appropriate seizure first aid
 - Need for rescue therapy
 - Need for EMS
 - Develop/update Seizure Action Plan

Rectal Medications (Diazepam Rectal Gel – Diastat Acudial)

- Can be used by children (2 years and older) and adults
- Sleepiness is the most commonly reported event in clinical trials (23%)
- Respiratory depression is NOT a common problem
- Specifically designed to be administered by a layperson
- Pre-measured syringe

Advantages

- Can be used in conscious or unconscious person
- Is rapidly absorbed
- Avoids nausea or vomiting
- Easy and safe to use

Disadvantages

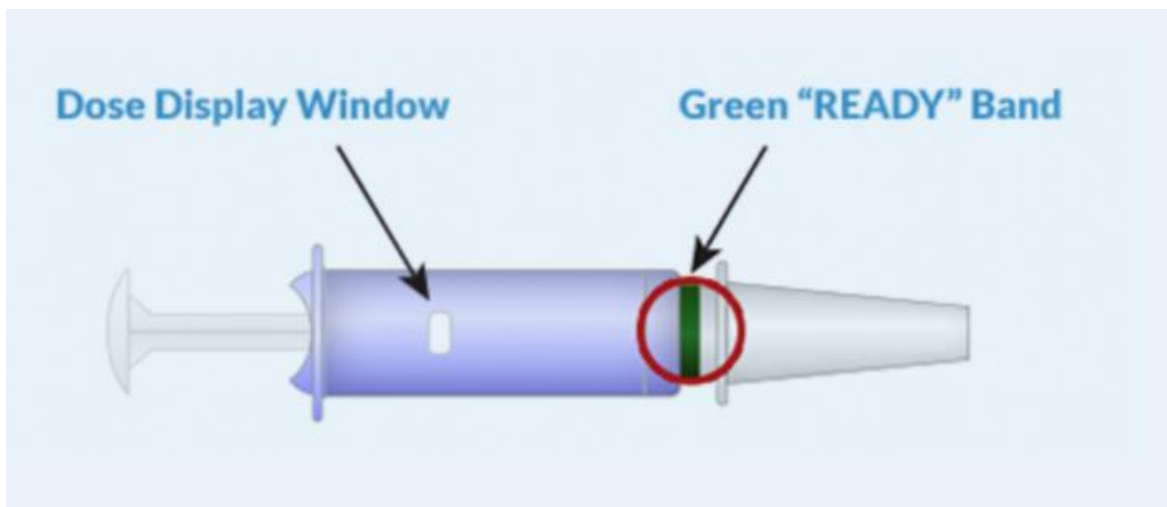
- Not acceptable by some people
- Usually need someone to give it
- Hard to give to a large person, someone in a wheelchair, or to a person moving
- Absorption may not be consistent



How to Administer

- Turn the person on their side so they are facing you (or the person who will be giving it)
- Get the medicine out of the package and check the dose of the medicine with the physician's order (refer to the Seizure Action Plan)
- Remove the cap from the syringe and make sure that the "seal pin" is removed with the cap
- Put lubricating jelly on the tip of the syringe
- Fix the person's clothes and bend the upper leg forward so the rectum can be seen
- Spread the cheeks of the buttocks and gently insert the tip of the syringe into the rectum
- Push the plunger on the syringe in and slowly count to 3. Count to 3 again before removing the syringe
- Then squeeze the buttocks together and count to 3 to prevent leaking of the medicine
- Fix the person's clothes back to normal
- Follow the physician's recommendations for observing the person afterwards

Store: room temperature



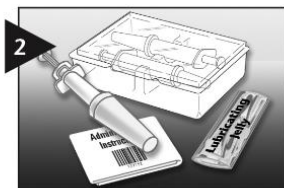
HOW TO ADMINISTER AND DISPOSAL

Diastat®
(diazepam rectal gel)

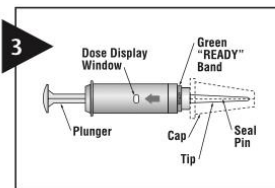
Diastat® AcuDial™
(diazepam rectal gel)



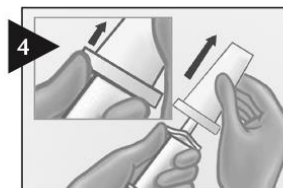
1 Put person on their side where they can't fall.



2 Get medicine.



3 Get syringe.
Note: Seal Pin is attached to the cap.



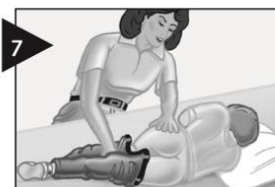
4 Push up with thumb and pull to remove cap from syringe. **Be sure Seal Pin is removed with the cap.**



5 Lubricate rectal tip with lubricating jelly.



6 Turn person on side facing you.



7 Bend upper leg forward to expose rectum.



8 Separate buttocks to expose rectum.



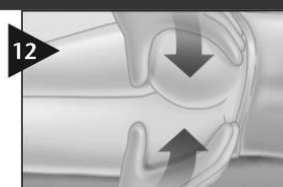
9 Gently insert syringe tip into rectum. *Note: Rim should be snug against rectal opening.*



10 Slowly count to 3 while gently pushing plunger in until it stops.



11 Slowly count to 3 before removing syringe from rectum.



12 Slowly count to 3 while holding buttocks together to prevent leakage.

ONCE DIASTAT® IS GIVEN



13 Keep person on side facing you, note time given and continue to observe.

Sublingual or Buccal Rescue Medicines

Advantages

- Rapid absorption
- Dissolves easily
- Enters blood directly
- No refrigeration
- Easy to carry



Disadvantages

- Can be inconvenient
- Potential irritation of mucus membrane
- May swallow medicine
- Inconsistent absorption if swallowed during seizure
- Taste
- Liquid may need refrigeration
- Risk of aspiration
- Risk of being bitten



Sublingual or Buccal Benzodiazepines: How to Use

When to Administer

- Avoid giving during loss of awareness
- Can be given between seizures, during clusters of any seizure type, or during focal aware seizure

How to Administer

- Forms: disintegrating tablets (clonazepam), regular tablets (both), liquid (lorazepam)
- Gloves may be used if desired
- Place tablets or liquid under or on tongue, or between cheek and gum

Store: tablets at room temperature, protect from light; liquid may need refrigeration

Intranasal Medications: Diazepam & Midazolam

- FDA-approved medicines are pre-packaged
- Drug delivery systems from compound pharmacies may differ
- May require medicine to be drawn up by nurse or caregiver from a vial of liquid medicine
- Some may have pre-filled syringes
- Nasal atomizer may be attached or obtained separately
- Dosage & storage may vary by preparation
- Should be clearly stated on student's seizure action plan
- **Nasal Diazepam - Valtoco®**

- Indicated for acute treatment of stereotypic episodes of frequent seizure activity
- Approved for people age 6 and >
- Intended to be given by patient or caregiver
- Each spray for **one-time** use (5 mg, 7.5 mg, 10 mg in 0.1 ml sprayer)
- Dose varies by weight and age
- Second spray used if needed 4 hrs after first dose
- Side effects may include: sleepiness, headache, nasal discomfort



- **Nasal Midazolam - Nayzilam®**
- Approved for use in people with epilepsy 12 years of age and older
- Indicated for acute treatment of intermittent, stereotypic episodes of frequent seizure activity, such as seizure clusters, acute repetitive seizures
- Events are distinct from a person's usual seizure pattern
- Intended to be given by patient or caregiver
- Each spray for **one-time** use, 5 mg/0.1 ml spray
- Second spray used if seizure persists after 10 min
- Side effects may include: sleepiness, headache, nasal discomfort, runny nose, throat irritation



Advantages

- Rich blood supply gives direct route into blood stream
- Rapid absorption
- Rates of absorption and plasma concentrations comparable:
- IV
- Better than SQ and IM
- Easy to use, convenient, safe

Disadvantages

- Special delivery apparatus
- Volume limitations - <0.2 ml
- Consider head position
- Potential for drainage
- Possible irritation of nose
- Needs patient cooperation?
- Needs patent airway

Vagus Nerve Stimulation (VNS)

- Approved for treatment of epilepsy when medicines don't work, surgery doesn't work or not feasible
- **Magnet** - form of intervention to abort seizure
- Used for any seizure type
- Provides on-demand stimulation
- **To stop seizure:** swipe magnet over generator implanted in chest, count 1-1,000-1,
- **To stop stimulation:** tape magnet over generator

