

# ADMINISTERING MIDAZOLAM

## FACT SHEET



# ADMINISTERING MIDAZOLAM

## Midazolam is prescribed for some people who have severe, cluster or prolonged seizures

Midazolam is a short-acting sedative that can be used in the emergency treatment of seizures. It belongs to a group of medications called benzodiazepines. Outside of the hospital setting, it is given in the nose (*intranasa*) or into the space between the cheek and teeth (*bucca*).



### Why is midazolam given into the nose or mouth?

This delivery route has several advantages:

- The nose and mouth provide very easy access and are practical for medication delivery outside the hospital setting
- It works relatively quickly. The nose and mouth are covered by mucus membrane and have a very good blood supply for rapid absorption
- No needles or injections are needed
- It's proven to be an effective, fast and safe way to administer midazolam

### What are the possible side effects?

- Slow shallow breathing
- Drowsiness, tiredness, weakness
- Poor coordination and balance
- Irritability or euphoria
- Stinging in the nostrils (intranasal), terrible taste (buccal)
- Confusion and disorientation can occur after a seizure or having midazolam



### What is the doctor's role?

The doctor is to provide written instructions that cover:

- The person's details including known allergies
- A clear description of the seizure(s) for which the midazolam has been prescribed
- The dose to be given
- When and how the midazolam is to be given
- When an ambulance is to be called
- An explanation of the effects and potential side-effects of giving midazolam in these circumstances.
- Referral to appropriate training for safe administration.



### Your role is to ensure that you:

- Provide effective first aid to someone having a seizure
- Recognise the person's seizure(s) for which midazolam has been prescribed
- Understand the doctor's written instructions - if unsure, ask
- Are trained to give midazolam and your training is reviewed every 2 years
- Are competent in performing seizure first aid and CPR

# IF A SEIZURE HAPPENS

- Remain calm
- Stay with person
- Time the seizure
- Keep the person safe and protect them from injury
- Identify that the seizure matches the description for which midazolam has been prescribed
- Prepare the midazolam for administration
- Give the midazolam and/or call an ambulance as stated in the doctor's written instructions



## Midazolam - packaging

Midazolam comes in two forms:

1. A prefilled syringe with midazolam (for buccal use only)
2. A plastic ampoule with liquid midazolam (for buccal or intranasal)

They both are labelled with medication name, dose (mg) & volume of solution (ml), and an expiry date

*\*NOTE: Midazolam also comes in glass ampoules, but it is not recommended using glass ampoules for this purpose*



## Midazolam - storage

- In the original box, protected from light
- Out of the reach of children
- In a cool, dry place, below 25°C
- Do not leave medication in a hot location such in a car or handbag. Use an insulated bag when transporting.

## Other information

Supplies: It is important to ensure that enough supplies of midazolam are always available.

Check the expiry date of the midazolam regularly. Return expired ampoules. Once it has expired, it may not be effective or safe to use.

An epilepsy management plan needs to be prepared, and training arranged for anyone who may be required to give the midazolam.

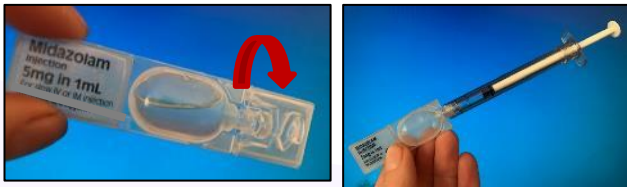
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## Preparing the medication

1. Wash hands or use hand sanitiser. Apply gloves.
2. Check the doctor's written instructions.
3. Check the medication name, dose and expiry date match that in the doctor's medication order
4. *Ampoule:*
  - Twist the top of the plastic ampoule to open and if using a syringe, draw up the prescribed amount

### 5. *Pre-filled Syringe:*

- Pull off the tamper evident tab to open the box. If this tab is broken, do not use the medication (call an ambulance)
- Unscrew (twist) the amber cap on the syringe to remove it. Do not use if the solution is not clear (e.g. cloudy or white particles are present)



## Giving the medication



Check the seizure is still active.

### 1. *Buccal* (in the cheek)

- Position the person on their side in the recovery position (if possible)
  - Buccal medication can also be given in the upright position
- Insert the ampoule, syringe or pre-filled syringe between the inside of the lower cheek and the teeth
- Gently squeeze the ampoule or syringe until the prescribed amount has been given.



### 2. *Intranasal* (in the nose)

- Lie the person on their back with their head tilted back. You may need to place something soft under the shoulders
- Hold the ampoule or syringe over one nostril, squeeze and drip the midazolam, 2-3 drops at a time, alternating nostrils
- Continue alternating nostrils until the full dose is given.



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## Giving the medication



### 3. *Intranasal via MAD*

- The MAD device allows medication to be given in the nose as an atomised spray. It is helpful when the person can't be laid down, such as in a wheelchair
- Firmly attach the atomiser (MAD) by twisting it on to the syringe
- Gently place the MAD into one nostril so that it is a tight fit, aiming slightly upward and outward toward the ear
- Press the syringe plunger to give approximately half the medication – it must be depressed quickly to create an atomised mist
- Remove and place MAD in other nostril in same manner and give the other half with a quick plunge of the syringe.



## After giving the medication

- Place the person on their side in the recovery position
- Stay with the person until they have recovered
- Monitor their breathing
- Unused midazolam should be safely discarded
- Document when and how much midazolam has been given.



## Call an ambulance

- If you are in any doubt about what to do
- If an injury has occurred
- As stated in the doctor's written instructions, the person's epilepsy management plan, or as per organisational policy.



[Visit our website for more information about epilepsy and emergency medication training](#)

# CHECKLIST

Prepare medication - start this BEFORE the 5 minute mark	
Gather the correct equipment	Medication ampoule, prefilled syringe, syringe or MAD Hand sanitiser, gloves Emergency Medication Management Plan (EMMP)
Clean hands and apply gloves	
Read medication order and medication confirming	Person's identity, seizure type Medication name and expiry date Dose, when and how to give Ambulance instructions
Set up and open medication	Use ampoule directly if it contains the required amount OR draw up required amount in syringe, if necessary OR gather the pre-filled syringe
Administer the medication	
Check the seizure is still active	If seizure has stopped, discard medication
Explain what you are doing to the person having the seizure	
1. Intranasal: Put person on their back with head tilted back. Hold the ampoule or syringe over nostril  OR Add MAD to end of syringe and Insert in nostril	- 2-3 drops alternating nostrils, continue <i>until full dose is given</i>  - Rapidly depress syringe plunger, to administer approximately half in each nostril via MAD
2. Buccal: Put the person in the recovery position Insert ampoule, syringe or pre-filled syringe between the lower teeth and cheek	- Gently plunge the full medication dose
After administration	
Place the person in the recovery position	
Call an ambulance if it has not been called and it is necessary or organisational policy	
Monitor breathing and stay with the person until they have fully recovered or the ambulance arrives	
Document what happened	
Tidy up and discard unused medication. Wash hands	

**Visit our website**



Contact Epilepsy Action Australia on:

Phone: 1300 37 45 37

Email: [epilepsy@epilepsy.org.au](mailto:epilepsy@epilepsy.org.au)

[Make a telehealth booking with an epilepsy nurse](#)

Disclaimer: This information is given to provide accurate, general information about epilepsy. Medical information and knowledge changes rapidly and you should consult your doctor for more detailed information. This is not medical advice, and you should not make any medication or treatment changes without consulting your doctor.