

# Intranasal Mucosal Atomization Device

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The Intranasal Mucosal Atomization Device (MAD) is an adapter that can be attached to a luer lock syringe to turn liquid medication into an atomized mist for intranasal delivery of the drug. The technology is similar to Afrin and other nasal sprays.

In veterinary medicine the intranasal MAD can be used for in-hospital or at-home delivery of emergency medications when IV access is not available. It would primarily be used for at-home emergency delivery of midazolam or diazepam during a seizure. The device may also be used with saline for animals with very dry nasal passages, with DDAVP for patients with von Willebrand's Disease, or with other drugs that can be delivered intranasally.

For seizure patients:

Rectal diazepam is effective at stopping seizures when administered at 2-3 times the intravenous dose. Midazolam is ineffective when administered rectally due to poor absorption. Recent studies have shown that diazepam suppositories are also very poorly absorbed. In addition, many clients find the rectal administration to be messy or off-putting. The atomizer allows the administration of midazolam or diazepam at the same dose as would be used intravenously. The volume dispensed to the client is lower than for rectal administration, which reduces the cost. The intranasal route CANNOT be used for aggressive animals or patients that "jaw chomp" as part of their seizures.

How to use it: Draw up the volume to be administered into a luer lock syringe. Attach the mucosal atomization device. Hold the patient's head/muzzle steady and inject half of the volume of medication into each nostril.

The device must be charged separately from the valium. The device can be reused and only needs to be replaced occasionally over the long-term.

Please review this video for more information and description of the device:

[Nasal Mucosal Atomization Device](#)

If you have questions about the atomizer, you can also request more information from Dr. Mark Troxel. He has been using it for several months and all clients so far have found this delivery method acceptable, and most often preferable, compared to rectal administration.

