

Choosing between epinephrine devices

A resource for Ontario physicians. Produced by the OMA Section on Allergy and Clinical Immunology.

Health Canada approved an epinephrine nasal spray in April 2026 for the emergency treatment of anaphylaxis. The device is similar to familiar intranasal devices such as naloxone and triptan devices.

You may consider prescribing the spray for individuals who weigh ≥ 30 kg including:

- Patients who require a prescription renewal for their auto-injector
- Patients who are at risk of or have a history concerning for anaphylaxis, especially while awaiting allergy assessment

Comparing epinephrine devices

The following devices are Health Canada approved for use during anaphylaxis. Choice of device should be a conversation between the patient/caregiver and prescriber.

	Nasal Epinephrine (Neffy®)	IM Epinephrine Autoinjector (Epipen®)
Size	 5.7 cm length x 4.4 cm width	 15 cm length x 2.2 cm width
Efficacy	Both are considered equally effective in treating anaphylaxis.	
Dose	2 mg dose > 30 kg 1 mg dose for individuals 15 to 30 kg – pending approval (2027)	0.3 mg dose > 25 kg 0.15 mg dose < 25 kg
Shelf Life	30 months from manufacture	24 months from manufacture
Units	2 units per prescription <i>*Note that for both nasal epinephrine and IM epinephrine autoinjectors, it is recommended to carry two devices, as one device only contains one dose and a second dose may be needed if symptoms do not improve, worsen or recur.</i>	1 unit per prescription
Temperature Range	Store at room temperature. Can tolerate temperatures up to 50°C Accidentally frozen units must be thawed 20 minutes before use but does not affect shelf life.	Store at room temperature. Avoid extreme heat or cold.
Cost per prescription	Estimated to be \$300-350 (includes two units)	\$100-150 (includes one unit)
Coverage	Limited private health insurance coverage as of July 2026. Not currently covered by ODB.	Covered by most private health insurers and ODB.

Dosing

The dosing principles for epinephrine nasal spray are the same as for auto-injectors. One device holds one dose. Give one spray into one nostril.

Two devices should be prescribed, and patients should always carry both devices. This is because each device only carries one dose, and patients may need a second dose if their symptoms do not improve, worsen or recur.

Counselling patients

Patients should always receive basic instruction on how to administer epinephrine devices. The following counselling considerations are helpful for patients receiving a first prescription for nasal epinephrine.

How to use

Individuals can self-administer the spray, or it can be administered by someone else.

- Insert nozzle **fully into one nostril**
- Hold **straight** (do not angle toward the septum or outer wall)
- **Press plunger firmly**
- **Do NOT prime/test**
- **Do not sniff during or immediately after administration** (may decrease absorption)
- **Discard after single use**

If symptoms do not improve, worsen, recur, or there was an administration error, give a second dose using a new device in the **same nostril after about five minutes**. Seek emergency care after use as suggested by your physician.

Side effects

In addition to the common side effects of epinephrine, such as shakiness, nervousness/anxiety, palpitations, dizziness, nausea, jitteriness and headaches, the nasal spray may also cause nasal discomfort, congestion, rhinorrhea, or throat irritation.

Common questions

Does congestion affect absorption?

No, congestion does not appear to affect absorption of the nasal spray.

Do structural or anatomical nasal conditions affect absorption?

It is possible that underlying structural and anatomical nasal conditions (e.g. polyps, history of nasal fractures or injuries, or history of nasal surgery) may affect absorption. In these cases, an auto-injector may be preferable.

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