Epinephrine
(ep-i-nef-rin)

**Description:** Bronchodilator; Alpha & Beta Agonist

**Other Names for this Medication:** Adrenalin®, Epi-Pen®

**Common Dosage Forms: Veterinary:** None. **Human:** Epi-Pen® Jr: 0.15 mg/0.3 mL; EpiPen®, Twinject®: 0.3 mg/0.3 mL single dose injectors.

This information sheet does not contain all available information for this medication. It is to help answer commonly asked questions and help you give the medication safely and effectively to your animal. If you have other questions or need more information about this medication, contact your veterinarian or pharmacist.

### Key Information

- **Note to pharmacist or veterinarian:** Be sure to discuss clinical signs associated with anaphylaxis. Review proper use of using the injector including determining dosage (if required) and injection technique using manufacturer’s patient insert.
- The best treatment for a severe allergic reaction is avoidance of situations that predispose your animal to triggers (eg, keep away from flowers if your animal has a severe allergy to bees).
- When avoidance cannot be prevented or when it happens unexpectedly, learn to recognize the early signs of a severe allergic reaction: collapse, pale gums, difficulty breathing (cats), noisy breathing (that is unusual for your animal), swelling of the face, vomiting or diarrhea.
- Always have this medication easily accessible. Consider attaching it to the leash, crate, or something that always travels with animal.
- Administer medication exactly as instructed by your veterinarian; refer to instructions that came with the product. Familiarize yourself with how the injector works before you need to use it.
- Absorption can be sped up by gently massaging the site of the shot.
- Store injector in carrier tube at room temperature; do not refrigerate. Do not use if liquid is discolored (pinkish or dark yellow) or particles are seen floating in it.
- Check expiration date and refill before expiration date.

### How is this medication useful?

Epinephrine is used to treat emergency allergic reactions (eg, anaphylaxis) in animals. It is injected either into the muscle (IM) or under the skin (subcutaneous, SC) usually using a pre-loaded injection system (eg, Epi-Pen®).
The FDA (U.S. Food & Drug Administration) has approved this drug for use in humans but it is not officially approved for use in animals. The FDA allows veterinarians to prescribe products containing this drug in different species or for other conditions in certain situations. You and your veterinarian can discuss why this drug is the most appropriate choice.

What should I tell my veterinarian to see if this medication can be safely given?
Many things might affect how well this drug will work in your animal. Be sure to discuss the following with your veterinarian so together you can make the best treatment decisions.

- Other drugs can interact with epinephrine, so be sure to tell your veterinarian and pharmacist what medications (including vitamins, supplements, or herbal therapies) you give your animal, including the amount and time you give each.
- Tell your veterinarian about any conditions or diseases your animal may have now or has had in the past.
- If your animal has been treated for the same disease or condition in the past, tell your veterinarian about the treatment and how well it did or didn’t work.
- If your animal is pregnant or nursing, talk to your veterinarian about the risks of using this drug.
- Tell your veterinarian and pharmacist about any medication side effects (including allergic reactions, lack of appetite, diarrhea, itching, hair loss) your animal has developed in the past.

How long until I will know if this medication is working, and how long will the effects of this medication last?
This medication should help your animal feel better within 1 to 2 hours. Your animal’s clinical signs should improve after that time.

The effects of this medication are short-lived, meaning they will stop working within 24 hours, although the benefits may be prolonged if your animal has decreased kidney and/or liver function.

When should this medication not be used or be used very carefully?
No drug is 100% safe in all patients, but your veterinarian will discuss with you any specific concerns about using this drug in your animal.

- Because epinephrine is only used in life-threatening situations (anaphylaxis), your veterinarian will discuss with you when it should be used for your animal and if your animal has any conditions (eg, heart disease, elevated blood pressure) where it might cause problems.

What are the side effects of this medication?
The most common side effects from epinephrine, when used for anaphylaxis, are a faster heart rate, feelings of nervousness and excitement, vomiting, and an increase in blood pressure. It is recommended that you contact your veterinarian immediately after you give this drug for follow-up care instructions.

If my animal gets too much of this medication (an overdose), what should I do?
Overdoses of epinephrine can be serious with faster heart rates, heart rhythm changes, and high blood pressures. Only give the amount your veterinarian has prescribed. If you witness or suspect an overdose, immediately contact your veterinarian or an animal poison control center for further advice. Animal poison control centers that are open 24 hours a day include: ASPCA Animal Poison Control Center (888-426-4435) and Pet Poison HELPLINE (855-764-7661); a consultation fee is charged for these services.

How should this medication be given?
For this medication to work, give it exactly as your veterinarian has prescribed. It’s a good idea to always check the prescription label to be sure you are giving the drug correctly.

- Your veterinarian will instruct you on the proper dose and use of this product. Be sure you understand how to properly use it before you need to use it with your animal.
- Always have the injector with you and easily accessible when you go anywhere with your animal.
- When handling an Epi-Pen®, do not remove the blue safety release until ready to use and never place your hand or fingers over the orange tip as this is where the needle comes out of the cartridge and you might accidentally inject yourself. If you accidentally inject yourself, contact your physician immediately.
- The medication is given in the muscle or under the skin (subcutaneous). Your veterinarian will show you the proper place to inject your animal. Do not give this medication into a vein.
- To speed up the absorption of the epinephrine and get it working faster, gently rub the area around the site after injecting. Remember, your animal may be sore at the injection site and react in a negative manner.
- Because additional treatment and monitoring of your animal may be required, immediately contact your veterinarian after using the injection.
What should I do if I miss giving a dose of this medication?
Because epinephrine is only used when needed for emergencies, if your animal starts having an allergic reaction and the drug is not available, contact your veterinarian or an animal emergency service immediately.

How should I store this medication?
- Store this medication in its original container (tube or box) at room temperature out of direct sunlight or bright lights. Do not allow exposure to extreme heat or freezing temperatures. Do not refrigerate or store in your vehicle's glove box.
- Keep away from children and other animals.

Can handling this medication be hazardous to me, my family, or other animals?
Other than avoiding accidentally sticking or injecting yourself, there are no specific precautions required when handling this medication. If you accidentally stick yourself with this medication, contact your family physician.

How should I dispose of this medication if I don't use it all?
- Do not flush this medication down the toilet or wash it down the sink. If a community drug “take-back” program is available, use this option. If there is no take-back program, the drug can be thrown away with regular trash. It should be thrown out in its original packaging to prevent accidental needle sticks or injection by anyone that may come in contact with it.
- Do not save leftover medication for future use or give it to others to use.

What other information is important for this medication?
Use of this drug may not be allowed in certain animal competitions. Check rules and regulations before entering your animal in a competition while this medication is being administered.

If you have any other questions about this medication, contact your veterinarian or pharmacist.