



## Advisory 17-04 Epinephrine Shortage

To: All Providers and Agencies

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Regional Medical Director

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A shortage exists in the availability of Epinephrine in ALL concentrations and packaging (vials, ampules, prefilled syringes). At this time, the region is beginning to experience this shortage. Although there is no substitution for Epinephrine 1:1000 (1 mg/mL), in the absence of Epinephrine 1:10,000 (0.1 mg/mL), ALS providers are authorized to use a vial/ampule of Epinephrine 1:1,000 (1 mg/mL) after dilution to achieve a 1:10,000 (0.1 mg/mL) concentration for patient administration. Please follow these instructions to use either method to dilute Epinephrine 1:1,000 (1 mg/mL) to 1:10,000 (0.1 mg/mL).

### The Saline Flush Method:

1. Label a 10 mL saline flush "epinephrine 0.1 mg/mL."
2. Using the same 10 mL saline flush, remove 1 mL of saline, leaving 9 mL in the syringe.
3. Draw up 1 mL of epinephrine 1:1,000 (1 mg/mL) into the 9 mL of saline, ensuring you do not inject saline into the vial/ampule. You now have 1:10,000 (0.1 mg/mL) concentration of epinephrine.
4. Remove the needle and administer as you would a pre-loaded syringe of epinephrine.

### The Normal Saline Bag Method:

1. Label a 100 mL normal saline bag with "epinephrine 0.1 mg/mL"
2. Label a 10 mL syringe with "epinephrine 0.1 mg/mL".
3. Draw 10 mL of epinephrine 1:1,000 (1 mg/mL) into the labeled syringe, and inject it into the 100 mL bag.
4. You now have a 1:10,000 (0.1 mg/mL) concentration of epinephrine, with 10 doses of epinephrine available.
5. Using the labeled syringe, draw 10 mL and administer as you would a pre-loaded syringe of epinephrine.

Using either method, in cardiac arrest always have the next dose drawn and ready to administer as the process can take time and delay timely epinephrine administrations.

We will continue to monitor the situation and advise if any additional measures are required. With any questions, please do not hesitate to contact the Division of Prehospital Medicine.

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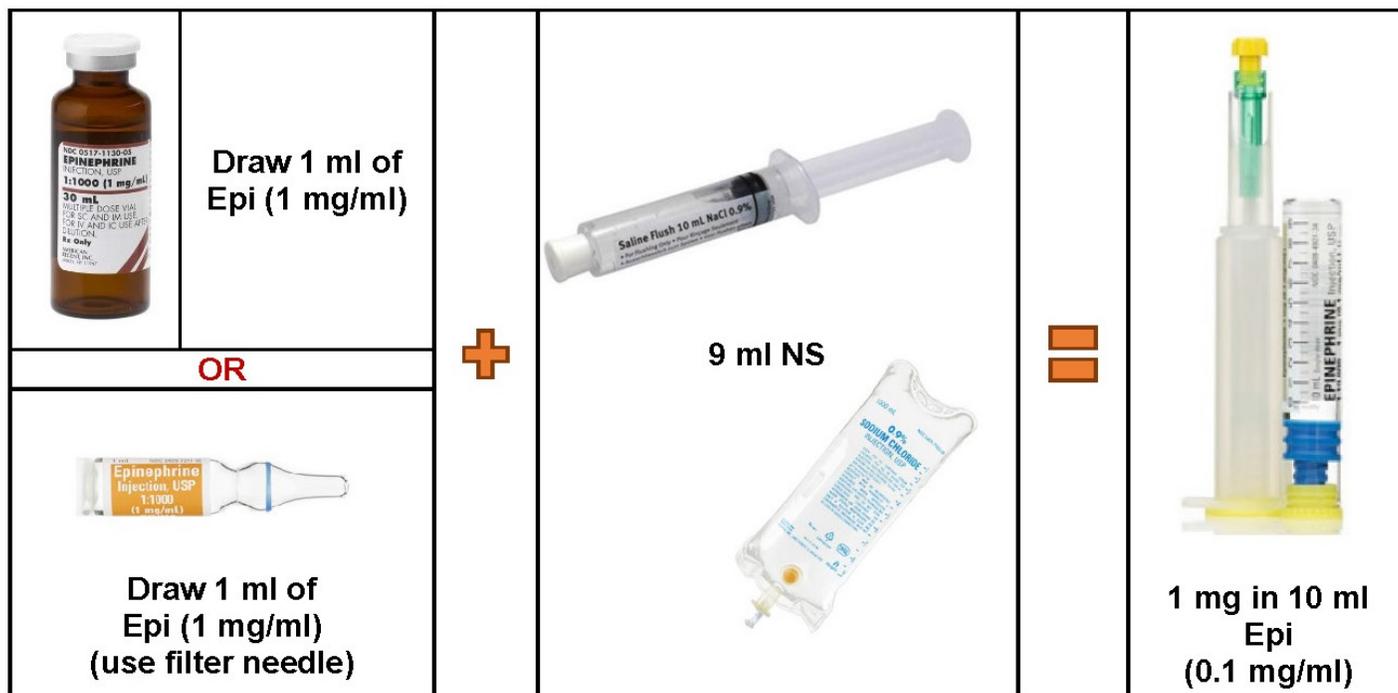
# Advisory 17-04: Epinephrine Shortage (Dilution of 1 mg/mL epinephrine)

Due to shortages of epinephrine (0.1 mg/mL), there may be occasions when epinephrine (1 mg/mL) must be diluted to achieve the correct concentration for cardiac arrest patients.

## The Saline Flush Method:

1. Label a 10 mL saline flush “epinephrine 0.1 mg/mL.”
2. Using the same 10 mL saline flush, remove 1 mL of saline, leaving 9 mL in the syringe.
3. Draw up 1 mL of epinephrine 1:1,000 (1 mg/mL) into the 9 mL of saline, ensuring you do not inject saline into the vial/ampule. You now have 1:10,000 (0.1 mg/mL) concentration of epinephrine.
4. Remove the needle and administer as you would a pre-loaded syringe of epinephrine.

CAUTION: When treating patients in cardiac arrest, always have the next dose drawn and ready to administer in advance of the time to administer. The process is timely and can delay epinephrine administrations.



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## The Normal Saline Bag Method:

1. Label a 100 mL normal saline bag with “epinephrine 0.1 mg/mL”
2. Label a 10 mL syringe with “epinephrine 0.1 mg/mL”.
3. Draw 10 mL of epinephrine 1:1,000 (1 mg/mL) into the labeled syringe, and inject it into the 100 mL bag.
4. You now have a 1:10,000 (0.1 mg/mL) concentration of epinephrine, with 10 doses of epinephrine available.
5. Using the labeled syringe, draw 10 mL and administer as you would a pre-loaded syringe of epinephrine.

CAUTION: When treating patients in cardiac arrest, always have the next dose drawn and ready to administer in advance of the time to administer. The process is timely and can delay epinephrine administrations.

