



County of Sacramento

Memorandum

Date: June 10, 2019
To: Advanced Life Support (ALS) Providers
From: Hernando Garzon, MD, Emergency Medical Services Agency Medical Director
Subject: Epinephrine 1:10,000 Concentration

The Sacramento County Emergency Medical Services Agency (SCEMSA) is aware of the national and local shortage of Epinephrine 1:10,000 concentration. SCEMSA has developed a short term solution to this issue: dilution of Epinephrine 1:1000 concentration. Once the Epinephrine is diluted it can be used in the same protocols as Epinephrine 1:10,000.

In order to dilute Epinephrine 1:1000 it must be preservative free. In general the ampules are preservative free. Multi-dose vials of Epinephrine are not preservative free and should not be used for the dilution procedure.

The procedure for dilution of Epinephrine 1:1000 is described below.

1. Ensure the Epinephrine 1:1000 is preservative free;
2. Draw 1ml of Epinephrine 1:1000 into a 10 ml syringe;
3. Using the same 10 ml syringe, draw 9 ml of preservative free normal saline and agitate the solution;
4. The solution in the 10 ml syringe contains 1 mg of Epinephrine 1:10,000.

Sincerely,

A handwritten signature in black ink that reads 'H. Garzon, M.D.'.

Hernando Garzon, MD
Medical Director, SCEMSA