

**County of Santa Clara
Public Health Department**



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January 18, 2012

To: Santa Clara County EMS System Stakeholders

From: Eric Rudnick, MD
Medical Director

Subject: Administrative Order 120118-1: Nitroglycerine Contraindication
Addition/Clarification

The Santa Clara County EMS Agency has issued Administrative Order 120118-1: Nitroglycerine Contraindication Addition/Clarification. It is widely known that patients taking the erectile dysfunction medications Viagra (Sildenafil), Cialis (Tadalafil), or Levitra (Vardenafil) within the past 24 hours can cause severe, life threatening drop in blood pressure if combined with nitrates. The medication Revatio (Sildenafil) is, in fact, the same medication as Viagra; it has been found to be effective in treating patients with Pulmonary Hypertension.

Revatio (Sildenafil) is being used to treat patients with Pulmonary Hypertension and offers significant challenges to EMS providers today. Patients taking Revatio can have a very dangerous or even fatal drug-drug interaction, as previously seen with erectile dysfunction medications. In addition, patients taking Revatio may experience a sudden vision loss that needs to be emergently evaluated (decreased blood flow to optic nerve). This expands the potential population of patients that could potentially have this very dangerous medication interaction. Please remember to screen all patients with any history of use of Revatio (Sildenafil), Viagra (Sildenafil), Cialis (Tadalafil), or Levitra (Vardenafil) in the past 24 hours. It is contraindicated to give nitrates to patients taking any of the above medications.

Please refer to Administrative Order 120118-1: Nitroglycerine Contraindication Addition/Clarification for further clarification and protocol changes. If there are any questions or concerns regarding this matter please feel free to contact Joe Williams by phone at 408-792-5666 or email at joseph.williams@phd.sccgov.org.

Attachment:

- Administrative Order 120118-1: Nitroglycerine Contraindication Addition/Clarification

*Board of Supervisors: Mike Wasserman, George Shirakawa, Dave Cortese, Ken Yeager, Liz Kniss
County Executive: Jeffrey V. Smith*



County of Santa Clara
Emergency Medical Services Agency
ADMINISTRATIVE ORDER

Number: 120118-01
Title: Nitroglycerine Contraindication Addition/Clarification
Effective: January 18, 2012

Effective immediately, on Wednesday, January 18, 2002, the following revision to Santa Clara County Prehospital Care Policy 700 (clinical protocols) is in effect:

Protocol	New Language	Deleted Language
Suspected Cardiac Ischemia (A08)	"To avoid hypotension, withhold Nitroglycerine if patient has taken Revatio (Sildenafil), Viagra (Sildenafil), Cialis (Tadalafil), or Levitra (Vardenafil) in the past 24 hours."	"To avoid NTG, withhold Nitroglycerine if patient has taken erectile dysfunction medication with specified time frames: • Viagra (sildenafil) or Levitra (vardenafil) within the past 24 hours. • Cialis (tadalafil) within past 36 hours."
Respiratory Distress (A11)	"To avoid hypotension, withhold Nitroglycerine if patient has taken Revatio (Sildenafil), Viagra (Sildenafil), Cialis (Tadalafil), or Levitra (Vardenafil) in the past 24 hours."	"Avoid NTG if patient has taken erectile dysfunction medication (see Suspected Cardiac Ischemia A08)"

Medical Director's Rationale:

Sildenafil is the same medication previously used for erectile dysfunction in men. The other trade name for Sildenafil is Viagra. Revatio will cause the same drug - drug interaction as Viagra with nitrates. When patients are given nitrates (for chest pain or congestive heart failure) while taking Revatio (Sildenafil) there can be a sudden, severe, and life threatening drop in blood pressure. The decrease in blood pressure may not respond to fluid boluses or vasopressors. In addition, patients taking Revatio (Sildenafil) may experience a sudden vision loss that needs to be emergently evaluated (decreased blood flow to optic nerve).

Authorized by:

Eric Rudnick, MD, FACEP
Medical Director

Michael Petrie
Director