Approved 9/2/26, Effective 1/15/27, replaces all prior versions

16HH – NITROGLYCERIN (NITROLINGUAL®, NITROMIST®, NITROSTAT®, NITROQUICK®, TRIDIL (IV INFUSION), NITRO-BID® - DERMAL)

EMERGENCY MEDICAL DISPATCHER	Sublingual Dosing - Own Self-Administration Phone Directive - 3E 5A 5C
EMERGENCY MEDICAL RESPONDER	Sublingual Dosing - Assist Pt with Own Self-Administration - 3E 5A 5C
EMT	Sublingual Dosing - Assist Pt with Own Self-Administration - 3E 5A 5C
EMT-INTERMEDIATE 85	Sublingual Dosing - Assist Pt with Own Self-Administration - 3E 5A 5C
ADVANCED EMT	Sublingual Dosing- 3E 5A 5C Transdermal – 3E 5A 5C
PARAMEDIC	

Class: Anti-Anginal, Vasodilator, Anti-Hypertensive (Nitrate)

Actions/Pharmacodynamics: Arterial and venous vasodilator through relaxing vascular smooth muscle. Reduces cardiac afterload resistance and cardiac preload volume respectively. Myocardial oxygen consumption/demand is decreased. Systemic blood pressure is decreased.

Indications: Dyspnea - Congestive Heart Failure (3E)
Chest Pain - Uncertain Etiology (5A)
Acute Coronary Syndrome (5C)

Contraindications: Hypotension
Asymptomatic Hypertension
Erectile Dysfunction Medications **(**Requires OLMC Order Only)**
Sildenafil (Viagra®) or Vardenafil (Levitra®) use within 24 hours
Tadafil (Cialis®) use within 48 hours

Pharmacokinetics: Rapid vascular uptake within 3 minutes of sublingual dosing, with duration of effect up to 30 minutes. Rapid vascular effect within 1-3 minutes of intravenous dosing, with ongoing effect while continuous infusion. Vascular effect within 15-30 minutes of transdermal dosing, with ongoing effect while continued transdermal absorption.

Side Effects: The most serious side effect is hypotension, usually transient and responsive to supine positioning and intravenous fluid bolusing. Common, though non-serious, symptoms include: headache due to vasodilation, blurred vision, and dizziness. Advanced EMTs and Paramedics should exercise caution when applying transdermal nitroglycerin ointment, avoiding contact with bare hands to avoid experiencing personal side effects, typically headache and dizziness.

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PROTOCOL 16HH: Nitroglycerin (Nitrolingual®, NitroMist®, NitroStat®, NitroQuick®, Tridil - Intravenous, Nitro-BID® - Transdermal), cont.

Dosage: **Dyspnea - Congestive Heart Failure - Adult (3E)**
Acute Coronary Syndrome - Adult (5C)
0.4 mg sublingual spray or tablet if systolic BP > 100 mmHg. Single dose unless by Paramedic. May repeat 0.4 mg sublingual spray or tablet every 5 minutes if systolic BP >100 mmHg until chest pain and/or respiratory distress resolves.

Following initial sublingual use, may utilize intravenous infusion start at 10 mcg/min, titrate slowly to effect. Maximum infusion rate without OLMC consult is 50 mcg/min.

Following initial sublingual use, may utilize transdermal application of 1½ inches ointment to chest wall.

Chest Pain - Uncertain Etiology - Adult (5A)
0.4 mg sublingual spray or tablet if systolic BP >100 mmHg. Single dose unless by Paramedic. If chest pain improved with initial dose, 0.4 mg sublingual spray or tablet every 5 minutes until chest pain and/or respiratory distress resolves.

Following initial sublingual use, may utilize intravenous infusion start at 10 mcg/min, titrate slowly to effect. Maximum infusion rate without OLMC consult is 50 mcg/min.

Following initial sublingual use, may utilize transdermal application of 1½ inches ointment to chest wall.

How Supplied:
Metered dose spray 0.4 mg/spray.
Tablets for sublingual absorption 0.4 mg.
Intravenous infusion - Mix 50 mg into 250 mL D5W (200 mcg/mL)
10 mcg/min using microdrip infusion set is 3 mL/hour rate
20 mcg/min using microdrip infusion set is 6 mL/hour rate
Transdermal ointment in 2% nitroglycerin concentration
1½ inches = 22.5 mg of nitroglycerin
(Always check concentration and dose per container at time of patient medication administration)