



Mahidol University
Faculty of Medicine Siriraj Hospital

Off-line & Online medical direction

Sattha Riyapan MD MPH
Department of Emergency Medicine
Faculty of Medicine Siriraj Hospital
Mahidol University THAILAND

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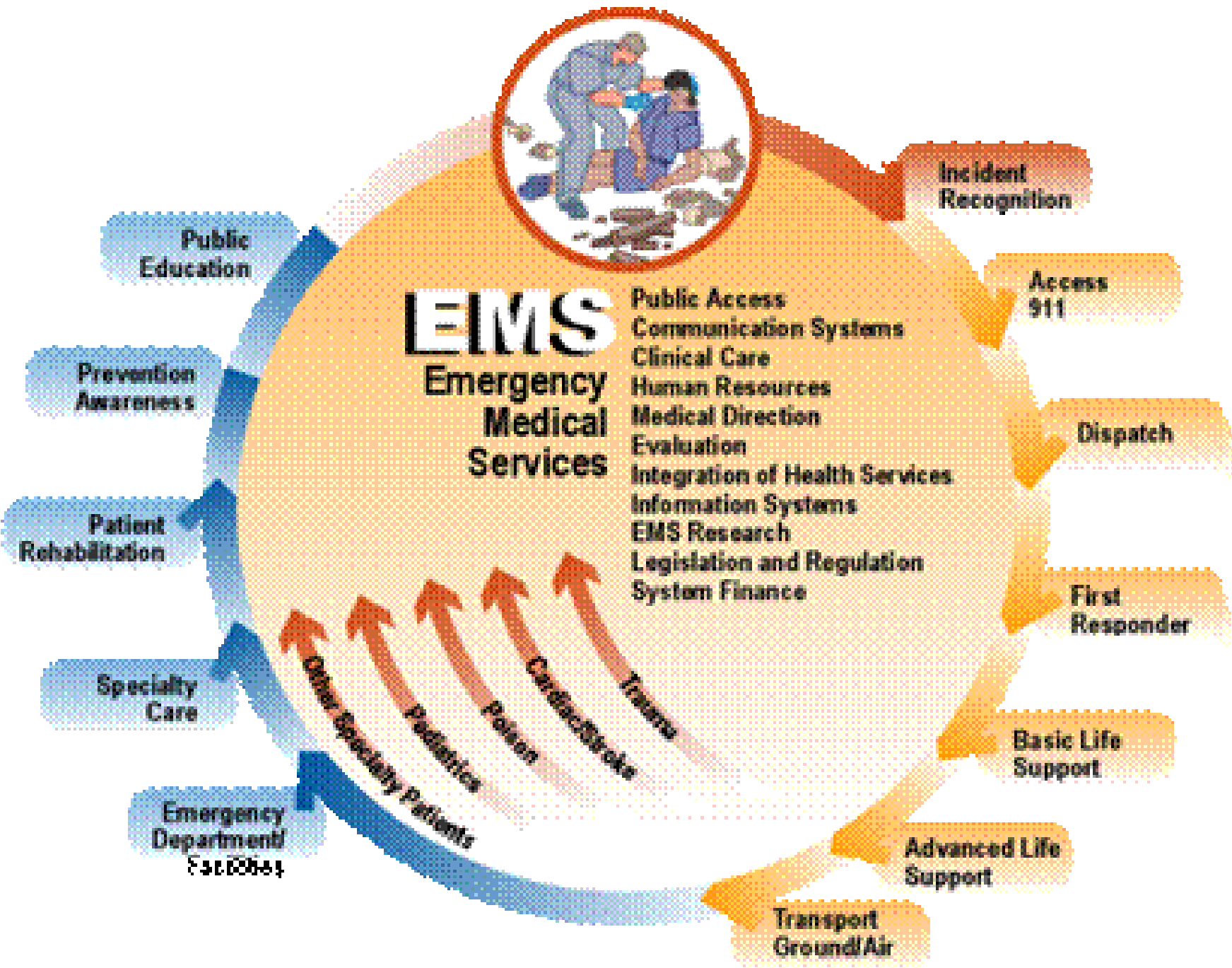


Speaker

- 2007: Medical Doctor, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand
- 2010: Thai Board of Emergency Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand
- 2016: Emergency Medical Service Fellowship, Penn State Hershey Medical Center, USA
- 2016: Master of Public Health, The Pennsylvania State University, USA







Optimal prehospital care results from a combination of:

- Careful patient assessment
- Proper prehospital medical intervention
- Appropriate medical consultation

อำนาจหน้าที่ ขอบเขต ความรับผิดชอบ และข้อจำกัดในการปฏิบัติการแพทย์ ของผู้ช่วยเวชกรรมตามคำสั่งการแพทย์หรือการอำนวยการ พ.ศ. ๒๕๕๖

“ผู้ช่วยเวชกรรม” หมายความว่า ผู้ปฏิบัติการที่ได้รับประกาศนียบัตรประเภทปฏิบัติการแพทย์ตามประกาศคณะกรรมการการแพทย์ฉุกเฉิน เรื่อง การให้ประกาศนียบัตรและการปฏิบัติการฉุกเฉินของผู้ปฏิบัติการ พ.ศ. ๒๕๕๔ ซึ่งได้รับมอบหมายให้ทำปฏิบัติการแพทย์โดยที่ไม่ได้เป็นผู้ประกอบวิชาชีพหรือเป็นผู้ประกอบวิชาชีพซึ่งทำปฏิบัติการแพทย์นอกเหนืออำนาจหน้าที่ ขอบเขต ความรับผิดชอบ และข้อจำกัดตามกฎหมายว่าด้วยวิชานั้น

“ผู้ประกอบวิชาชีพ” หมายความว่า ผู้ปฏิบัติการซึ่งเป็นผู้ประกอบวิชาชีพตามกฎหมายว่าด้วยสถานพยาบาล ซึ่งปฏิบัติการแพทย์ตามอำนาจหน้าที่ ขอบเขต ความรับผิดชอบ และข้อจำกัดตามกฎหมายว่าด้วยวิชานั้น

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“คำสั่งการแพทย์” หมายความว่า คำชี้แจงให้เข้าใจและสั่งให้ทำตามเป็นลำดับขั้นตอนเพื่อให้
ผู้ช่วยเวชกรรมปฏิบัติการแพทย์ตาม

“อำนวยการ” หมายความว่า การอำนวยการทางการแพทย์ฉุกเฉินโดยแพทย์อำนวยการ
ปฏิบัติการฉุกเฉิน ซึ่งรวมถึงการจัดการและควบคุมการปฏิบัติการฉุกเฉินของผู้ช่วยเวชกรรม
ทั้งการอำนวยการทั่วไปและการอำนวยการตรง เพื่อให้ผู้ช่วยเวชกรรมรายงานภาวะของผู้ป่วยฉุกเฉิน
และปฏิบัติการฉุกเฉินตามคำสั่งการแพทย์

อำนาจหน้าที่ ขอบเขต ความรับผิดชอบ และข้อจำกัดในการปฏิบัติการแพทย์ ของผู้ช่วยเวชกรรมตามคำสั่งการแพทย์หรือการอำนวยการ พ.ศ. ๒๕๕๖

Off-line medical direction

“อำนาจการทั่วไป”

หมายความว่า การอำนวยการซึ่งได้จัดทำและประกาศไว้เป็นเอกสารด้วยวิธีการที่กำหนดไว้ล่วงหน้า เพื่อเป็นคำสั่งประจำ ขั้นตอนวิธี หรือเกณฑ์วิธีปฏิบัติการฉุกเฉินให้ผู้ช่วยเวชกรรมดำเนินการหรือปฏิบัติตาม รวมทั้งการตรวจสอบและพิจารณากระบวนการและผลการปฏิบัติการฉุกเฉินย้อนหลังด้วย

Online medical direction

“อำนาจการตรง”

หมายความว่า การอำนวยการเชื่อมตรงระหว่างบุคคลต่อบุคคลขณะกำลังปฏิบัติการฉุกเฉิน ณ สถานที่ที่มีผู้ป่วยฉุกเฉินหรือที่เกิดเหตุการณ์ หรือผ่านการสื่อสารทางไกลด้วยวาจา ลายลักษณ์อักษร อิเล็กทรอนิกส์ โทรคมนาคม หรือวิธีการสื่อสารอื่น

Off-line medical direction: Prehospital Protocols

- Initiate care
- Anticipate care that will be ordered from on-line medical direction

Prehospital Protocols

- Series of instructions or algorithm
- Based on chief complaint or clinical impression
- Define what interventions may/must be done
- Define when on-line medical direction should/must be contacted

WHAT MAKES A

GOOD

EMS PROTOCOL?

Scope of practice

- The procedures, actions, and processes that a provider is permitted to undertake in keeping with the terms of their professional license
- Limited to that which the law allows for specific education and experience, and specific demonstrated competency

2 Paramedics Face Inquiry Over Surgery In Emergency

By DAVID W. CHEN

Published: September 27, 1997

New Jersey health officials are investigating the actions of two paramedics who performed an emergency Caesarean section on Thursday to deliver the baby of a woman in North Bergen who was in cardiac arrest and could not be revived.

The paramedics acted while consulting by radio with emergency room doctors at Jersey City Medical Center, officials said, but state health regulations forbid paramedics to perform surgical operations. The emergency workers said they believed that the procedure was their only hope of saving the baby.

The full-term baby girl survived but was in critical condition yesterday; the mother, who was 37, died.

The two paramedics were placed on desk duty, with pay, pending the outcome of the state investigation, which officials said should be completed next week.

 FACEBOOK

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 REPRINTS



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NOTICES

Scope of Practice for Emergency Medical Service Providers

[44 Pa.B. 7487]
[Saturday, November 29, 2014]

Under 28 Pa. Code §§ 1023.24(d)(1), 1023.25(d)(1), 1023.26(d)(1), 1023.27(d)(1), 1023.28(d), 1023.29(d) and 1023.30(e), the Department of Health (Department) is publishing the scope of practice for emergency medical responders (EMR), emergency medical technicians (EMT), advanced emergency medical technicians (AEMT), paramedics (P), prehospital registered nurses (PHRN), prehospital physician extenders (PHPE) and prehospital physicians (PHP) under 35 Pa.C.S. §§ 8101—8157 (relating to Emergency Medical Services System Act).

Skills identified may be performed by an emergency medical service (EMS) provider at the provider's level of certification or registration only if the provider has successfully completed the approved education (cognitive, affective and psychomotor) on the specified skill, which includes training to perform the skill on adults, children and infants, as appropriate. EMRs, EMTs, AEMTs and Ps may only perform the skills identified, through either Statewide or other Department-approved protocols, or skills that may be ordered online by a medical command physician.

As the following chart indicates, a PHRN, PHPE and PHP may perform all skills identified as within a paramedic's scope of practice. Each of these EMS providers may perform additional skills as outlined as follows.

A PHRN who is appropriately credentialed by the EMS agency medical director may perform other services authorized by The Professional Nursing Law (63 P. S. §§ 211—225.5), when authorized by a medical command physician through either online medical command or through the applicable Statewide or Department-approved EMS protocols.

A PHPE who is appropriately credentialed by the EMS agency medical director may perform services within the scope of practice of a physician assistant under the Medical Practice Act of 1985 (63 P. S. §§ 422.1—422.51a) or the Osteopathic Medical Practice Act (63 P. S. §§ 271.1—271.18), when authorized by a medical command physician through either online medical command or through applicable Statewide or Department-approved EMS protocols. When a PHPE functions as an EMS provider, the physician supervision requirements applicable to a physician assistant under the Medical Practice Act of 1985 and the Osteopathic Medical Practice Act do not apply.

A PHP who is appropriately credentialed by the EMS agency medical director may perform skills within a paramedic's scope of practice and other skills within the practice of medicine or osteopathic medicine. A PHP may not perform a skill that the PHP has not been educated and trained to perform.

Under 28 Pa. Code § 1023.1(a)(1)(vi) and (vii) (relating to EMS agency medical director), the EMS agency medical director must make an initial assessment of each EMS provider at or above the AEMT level, and then within 12 months of each prior assessment, to determine whether the EMS provider has the knowledge and skills to competently perform the skills within the EMS provider's scope of practice, and a commitment to adequately perform other functions relevant to the EMS provider providing EMS at that level. EMS providers at or above the AEMT level may only perform skills that the EMS agency medical director has credentialed them to perform.

The Department wishes to highlight the following change to the scope of practice for all EMS providers: Effective November 29, 2014, administration of Naloxone in intranasal or auto-injector form is approved for all levels of EMS providers and is listed under the "Medications" category of this notice. This change is made under the act of September 30, 2014 (P. L. 2487, No. 139) (35 P. S. §§ 780-113.7 and 780-113.8), which requires

| Category | Skill | EMR | EMT | AEMT | P* |
|----------|--------------------------------|------------------|------------------|------|-----|
| 1 | Airway/Ventilation/Oxygenation | No | No | Yes | Yes |
| 2 | Airway/Ventilation/Oxygenation | Yes | Yes | Yes | Yes |
| 3 | Airway/Ventilation/Oxygenation | No | No | No | No |
| 4 | Airway/Ventilation/Oxygenation | Yes ² | Yes ² | Yes | Yes |
| 5 | Airway/Ventilation/Oxygenation | No | Yes ² | Yes | Yes |
| 6 | Airway/Ventilation/Oxygenation | Yes | Yes | Yes | Yes |
| 7 | Airway/Ventilation/Oxygenation | No | No | No | Yes |
| 8 | Airway/Ventilation/Oxygenation | No | No | No | No |
| 9 | Airway/Ventilation/Oxygenation | No | No | No | No |
| 10 | Airway/Ventilation/Oxygenation | No | Yes ¹ | Yes | Yes |
| 11 | Airway/Ventilation/Oxygenation | No | No | No | No |
| 12 | Airway/Ventilation/Oxygenation | No | No | No | Yes |
| 13 | Airway/Ventilation/Oxygenation | No | No | No | Yes |
| 14 | Airway/Ventilation/Oxygenation | No | No | No | Yes |

133 skills!

อำนาจหน้าที่ ขอบเขต ความรับผิดชอบ และข้อจำกัดในการปฏิบัติการแพทย์ ของผู้ช่วยเวชกรรมตามคำสั่งการแพทย์หรือการอำนวยการ พ.ศ. ๒๕๕๖

| รายการปฏิบัติการแพทย์ | ขอบเขต ความรับผิดชอบ และข้อจำกัด ของผู้ช่วยเวชกรรมระดับต่างๆ | | | |
|--|---|------|------|------|
| | นฉพ. | จฉพ. | พฉพ. | อฉพ. |
| ๒. การประเมินผู้ป่วยฉุกเฉิน (assessment) | | | | |
| ๒.๑. การประเมินเบื้องต้น (initial assessment) | ข | ข | ข | ข |
| ๒.๒. การคัดแยกผู้ป่วย (triage) | ข | ข | ค | ค |
| ๒.๓. การประเมินมุ่งส่วนสำคัญ (focused assessment) | ข | ข | ข | ค |
| ๒.๔. การประเมินการบาดเจ็บ/ตรวจร่างกายอย่างรวดเร็ว (rapid trauma assessment/rapid physical exam) | ข | ข | ข | จ |
| ๒.๕. การประเมินอย่างละเอียด (detailed assessment) | ข | ข | ข | จ |
| ๒.๖. การประเมินต่อเนื่อง (ongoing assessment) | ข | ข | ข | ข |

Patient Population

May determine which skills EMS providers need to be able to perform

- Dialysis patients – access fistula?
- Cancer patients – access Mediports?

Geography

May determine which skills EMS providers need to be able to perform

- Major trauma/highways – trauma procedures?
- Skyscrapers – field termination of resuscitation, Mechanical CPR?



Duration of transport

Transport to the closest appropriate facility may take a lot of time

- STEMI patients – tPA?

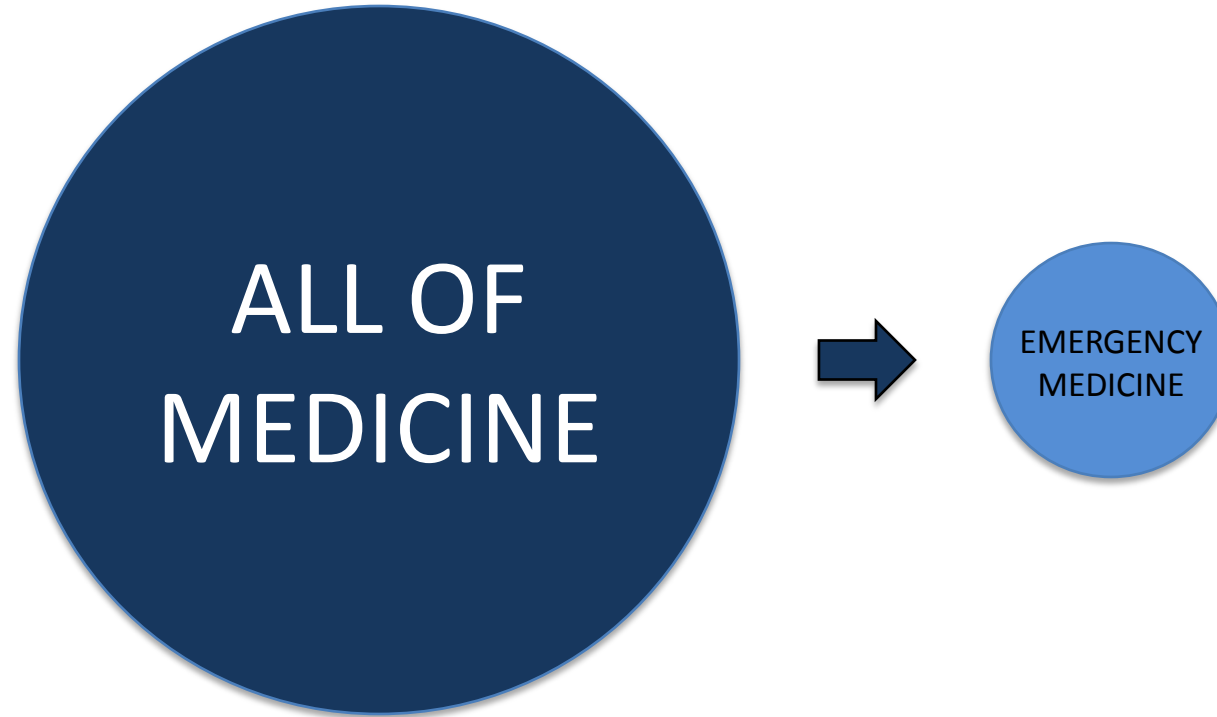
- Sepsis patients – lactate meters? antibiotics?

- Trauma patients – blood and blood products?

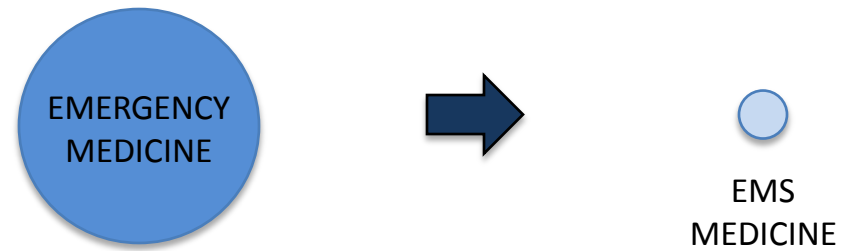
Evidence

Evidence-based medicine (EBM) is intended to optimize decision-making by emphasizing the use of evidence from well designed and conducted research.

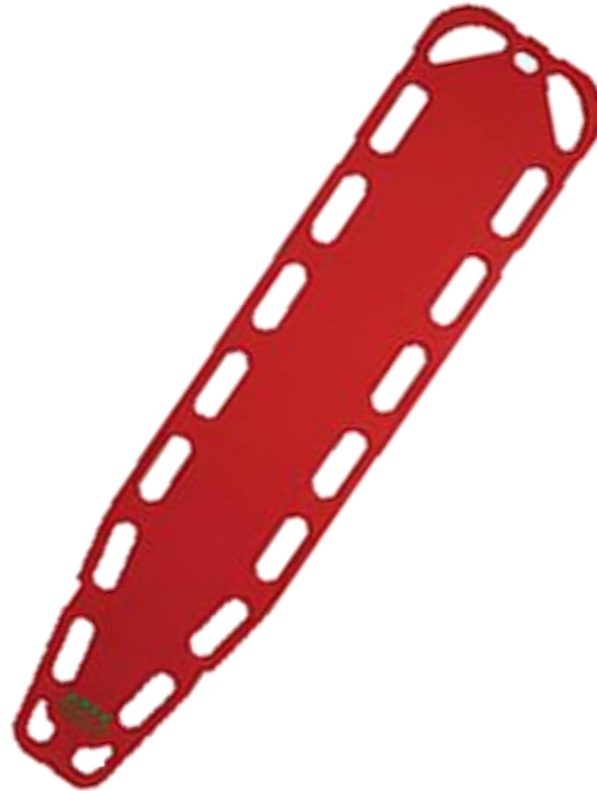
EVIDENCE



EVIDENCE



A FEW THINGS WE GOT WRONG...



Where to begin

Protocols divided into 2 parts:

– Standing orders

- Authorized by protocol
- Provider may perform these items if indicated without contacting medical control

– Orders requiring on-line medical control

- Provider must contact and consult with medical control before initiating these protocols.

**NARROW COMPLEX TACHYCARDIA – ADULT
STATEWIDE ALS PROTOCOL**

Initial Patient Contact – see protocol #201

Manage Airway/Ventilate, if needed
Apply Oxygen
Monitor ECG & Pulse Oximetry

STABLE

**Unstable with serious signs or symptoms¹
Related symptoms uncommon if HR <150**

UNSTABLE

IV/IO Access
12-Lead ECG, if available

Regular Narrow QRS Rhythm?

REGULAR²

Consider Valsalva Maneuver³

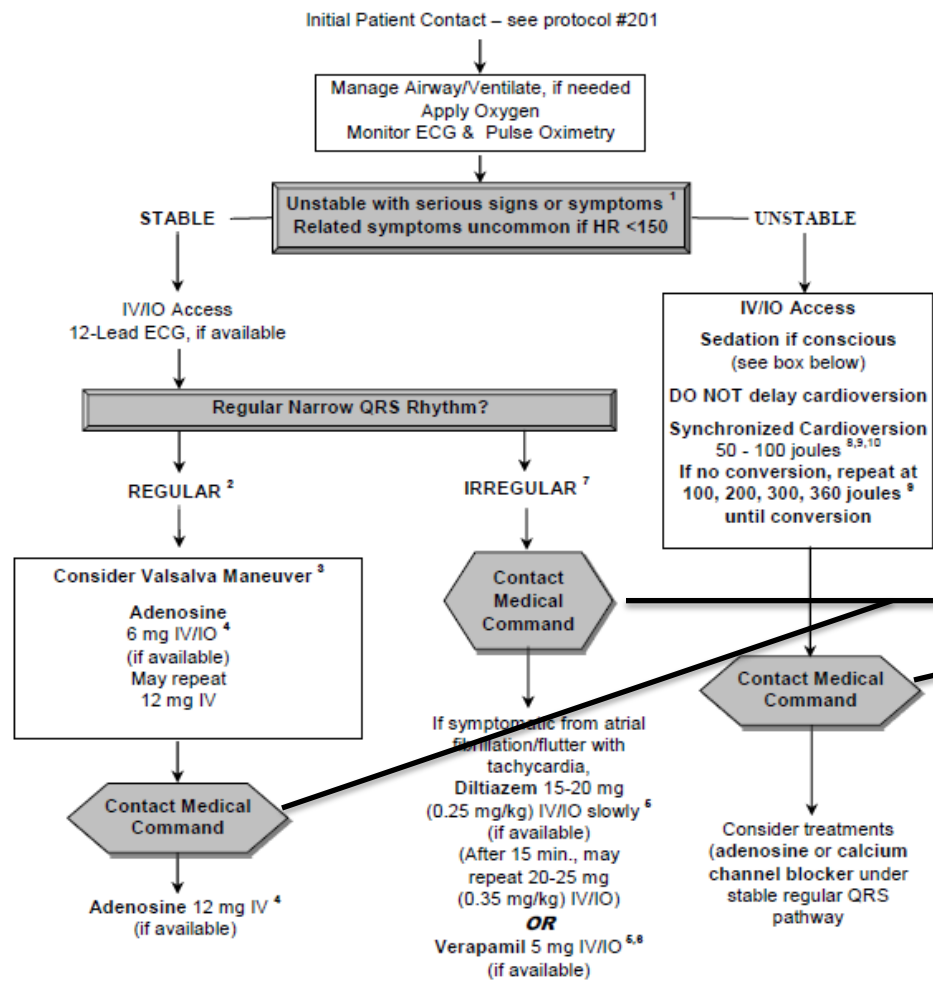
Adenosine
6 mg IV/IO⁴
(if available)
May repeat
12 mg IV

IV/IO Access
Sedation if conscious
(see box below)
DO NOT delay cardioversion
Synchronized Cardioversion
50 - 100 joules^{8,9,10}
If no conversion, repeat at
100, 200, 300, 360 joules⁹
until conversion

Sedation Options:
(Choose one)
(Titrate to minimum amount necessary)
Midazolam 1-5 mg IV/IO
(0.05 mg/kg) titrated
OR
Diazepam 5-10 mg IV/IO
(0.1 mg/kg) titrated to effect
OR
Lorazepam 1-2 mg IV/IO
0.1 mg/kg, max 2 mg/dose) titrated

Standing Orders

**NARROW COMPLEX TACHYCARDIA – ADULT
STATEWIDE ALS PROTOCOL**



**Sedation Options:
(Choose one)**
(Titrate to minimum amount necessary)
Midazolam 1-5 mg IV/IO
(0.05 mg/kg) titrated
OR
Diazepam 5-10 mg IV/IO
(0.1 mg/kg) titrated to effect
OR
Lorazepam 1-2 mg IV/IO
0.1 mg/kg, max 2 mg/dose) titrated

**Orders Requiring
On-line Medical Command**

Protocols should be symptom-oriented:

- Chest pain
 - Suspected cardiac chest pain
 - Traumatic chest pain
- Difficulty breathing
- Allergic reaction

เกณฑ์วิธีการคัดแยกและจัดลำดับ
การจ่ายงานบริบาลผู้ป่วยฉุกเฉิน
ตามหลักเกณฑ์ที่ กพฉ.กำหนด พ.ศ.2556
(Emergency Medical Triage Protocol
and Criteria Based Dispatch)

มาดเจ็บบ ปวยฉุกเฉิน โทร.
1669

สถาบันการแพทย์ฉุกเฉินแห่งชาติ
NATIONAL INSTITUTE FOR EMERGENCY MEDICINE

The image shows the cover of a manual titled 'เกณฑ์วิธีการคัดแยกและจัดลำดับการจ่ายงานบริบาลผู้ป่วยฉุกเฉินตามหลักเกณฑ์ที่ กพฉ.กำหนด พ.ศ.2556' (Emergency Medical Triage Protocol and Criteria Based Dispatch) published in 2013. The cover features a photograph of a female nurse in a white uniform and cap talking on a mobile phone. The background is a teal and blue gradient. At the bottom, there is a logo for the National Institute for Emergency Medicine (สพอ.) and the text 'สถาบันการแพทย์ฉุกเฉินแห่งชาติ NATIONAL INSTITUTE FOR EMERGENCY MEDICINE'. The emergency number '1669' is prominently displayed in the bottom left corner.

“MAY”

or

“CONSIDER”

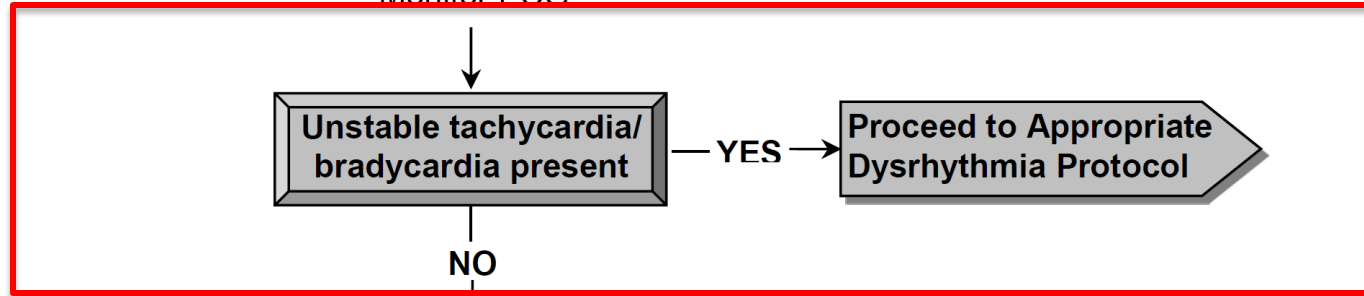
INTERVENTIONS:

1. While assessing the patient, attempt to determine the cause of the allergic reaction.
2. Assess and manage airway, breathing and circulation.
3. Secure an advanced airway if the potential for airway obstruction exists or the patient has severe dyspnea.
4. If the patient is experiencing dyspnea (with or without wheezing), administer inhaled bronchodilators and repeat as needed (consider epinephrine (1:1,000) 0.3-0.5 ml subcutaneous for severe cases). When administering epinephrine IV to patients with risk of cardiovascular disease, consider beginning at the lower end of the dosage range.
5. Establish a large bore IV of NSS @ a KVO rate.
6. If the patient is hypotensive, administer a fluid bolus of 250 ml of NSS. Repeat as necessary, so long as the patient shows no sign of volume overload. Treat per the *Hypotension Patient Care Guideline (MED17)*.
7. Consider IV administration of epinephrine 0.1-0.5 mg (1-5 ml of 1:10,000) IV over 5 minutes if the patient is experiencing a severe life-threatening reaction or shows signs of shock.
8. Administer diphenhydramine 25-50 mg IVP.
9. Consider administering methylprednisolone 125 mg IVP.
10. Consider administering H2 blocker.
11. If the patient remains hypotensive after multiple fluid boluses, consider initiating a continuous epinephrine infusion at a rate of 1-10 mcg/min.

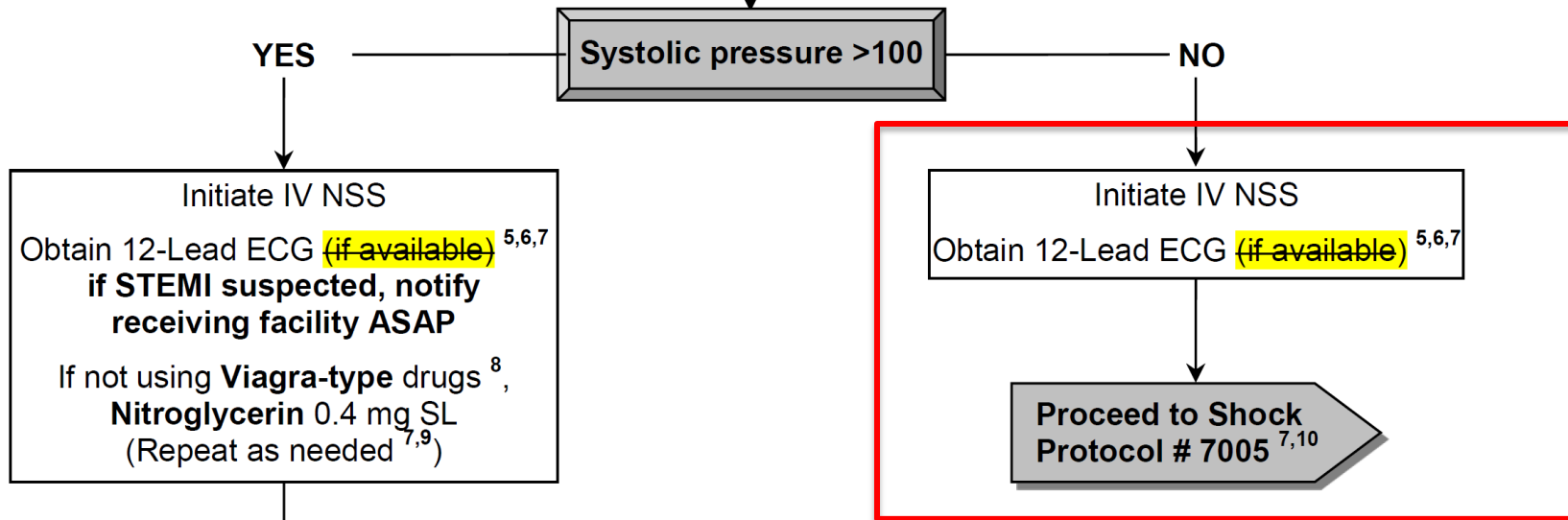
Patients may require care derived from multiple protocols, protocols not yet devised or in the absence of online medical control.

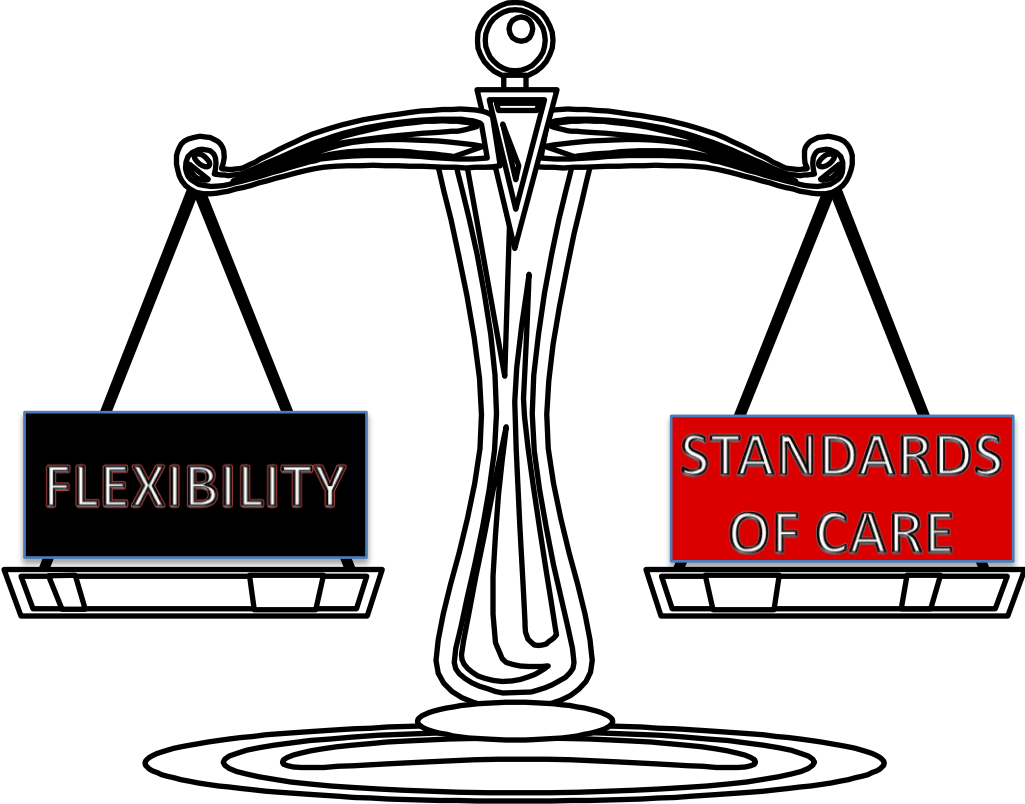
SUSPECTED ACUTE CORONARY SYNDROME STATEWIDE ALS PROTOCOL

Initial Patient Contact – see Protocol #201
Consider non-cardiac causes ^{1,2}
Administer Oxygen titrated to SpO₂ ≥ 94 ³
Monitor Pulse Oximetry
Monitor ECG



Administer Aspirin 324 mg PO chewed ⁴



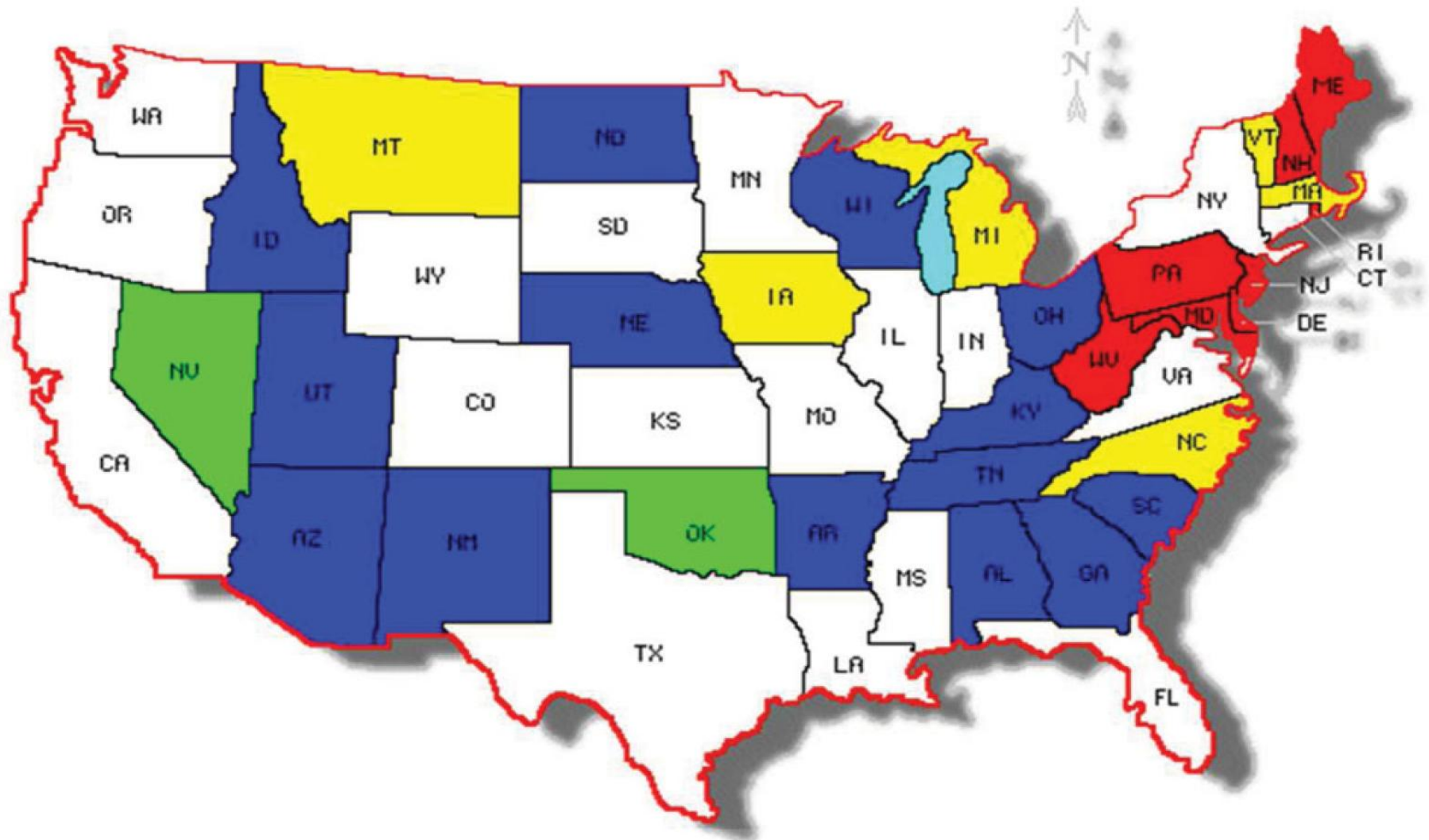
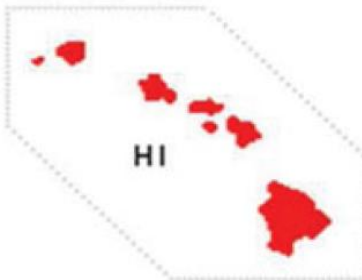


Characteristics of Statewide Protocols for Emergency Medical Services in the United States

Douglas F. Kupas MD, Ellen Schenk MPH, J. Matthew Sholl MD & Richard Kamin MD

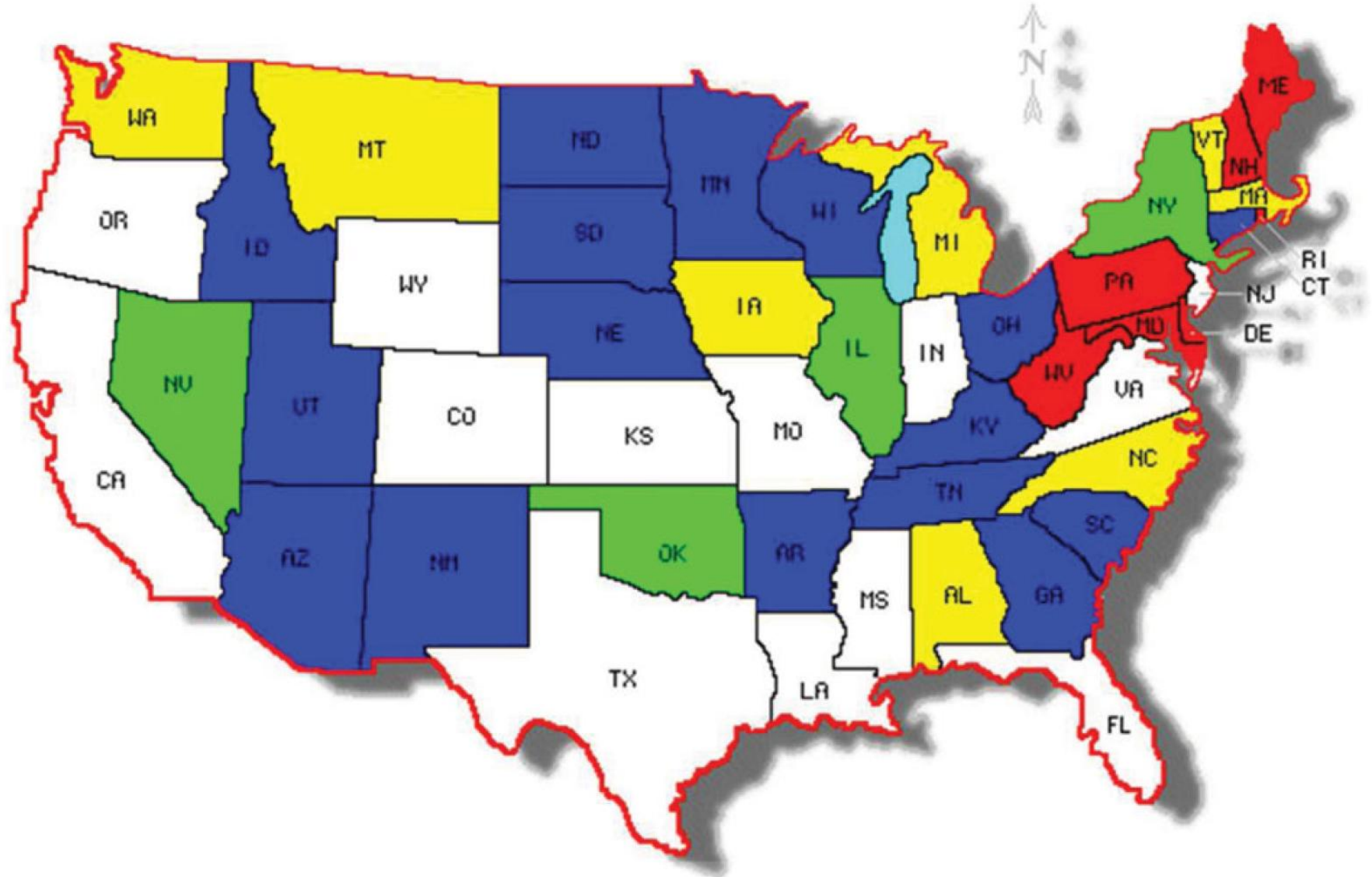
States with ALS Protocols 10/1/13

- - Mandatory A
- - Mandatory B
- - Mandatory C
- - Model Guidelines



NOTES:
As of 10/1/13

- - Mandatory A
- - Mandatory B
- - Mandatory C
- - Model Guidelines

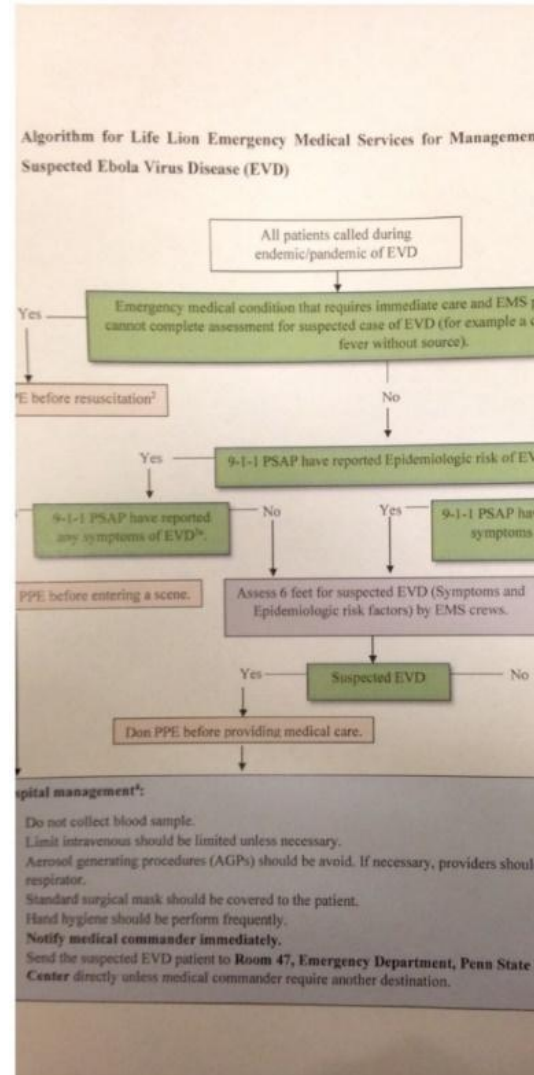
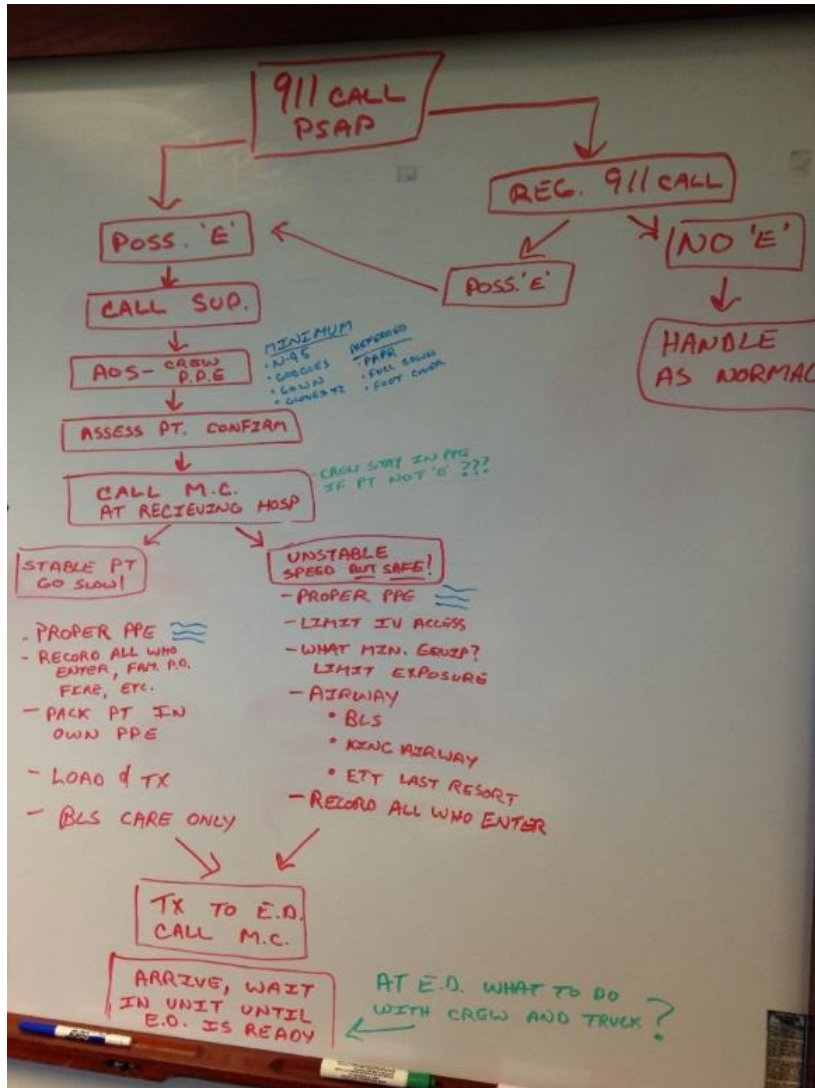


NOTES:
As of 10/1/13

COMPARISON OF EMERGENCY MEDICAL SERVICES SYSTEMS ACROSS PAN-ASIAN COUNTRIES: A WEB-BASED SURVEY

Sang Do Shin, MD, PhD, Marcus Eng Hock Ong, MBBS, MPH, Hideharu Tanaka, MD,
Matthew Huei-Ming Ma, MD, PhD, Tatsuya Nishiuchi, MD, Omer Al Sakaf, MD,
Sarah Abdul Karim, MD, Nalinas Khunkhlai, MD, Chih-Hao Lin, MD, Kyoung Jun Song, MD,
Hyun Wook Ryoo, MD, Hyun Ho Ryu, MD, Lai Peng Tham, MBBS (S'pore), MMed
(Paediatrics), David C. Cone, MD

Experiences in EMS protocol



Life Lion Emergency Medical Services Protocol for Suspected Ebola Virus Disease (EVD)

Purpose: To outline the Ebola Virus Disease (EVD) screening algorithm, prehospital management, and prehospital care after transferring the case during an epidemic/pandemic of EVD.

Criteria:

- This protocol applies to all patients encountered by Emergency Medical Service (EMS) during an epidemic/pandemic of EVD.
- The Centers for Disease Control and Prevention (CDC) has declared an epidemic of EVD.

Exclusion criteria: None

Performed by: Life Lion Emergency Medical Services EMTs and Paramedics

Definition:

A. Suspected Ebola Virus Disease (EVD) patient is a patient who has both consistent symptoms and epidemiologic risk factors as follows:

- Symptoms:** Fever, headache, joint and muscle aches, weakness, fatigue, vomiting, stomach pain and lack of appetite, and some cases bleeding.
- Epidemiologic risk factors within past 21 days before the onset of symptoms:**
 - Contact with blood or other body fluids or human remains of a patient who has or suspected to have EVD.
 - Residence in- or travel to--an area where EVD transmission is active (e.g., West Africa: Guinea, Liberia, Sierra Leone, Nigeria, Senegal; United States: Tennessee, Presbyterian Hospital).
 - Direct handling of bats or non-human primates from disease-endemic areas.

Useful resource

www.emsprotocols.org

Asthma/ COPD/ Bronchospasm Pediatric

Pennsylvania Department of Health

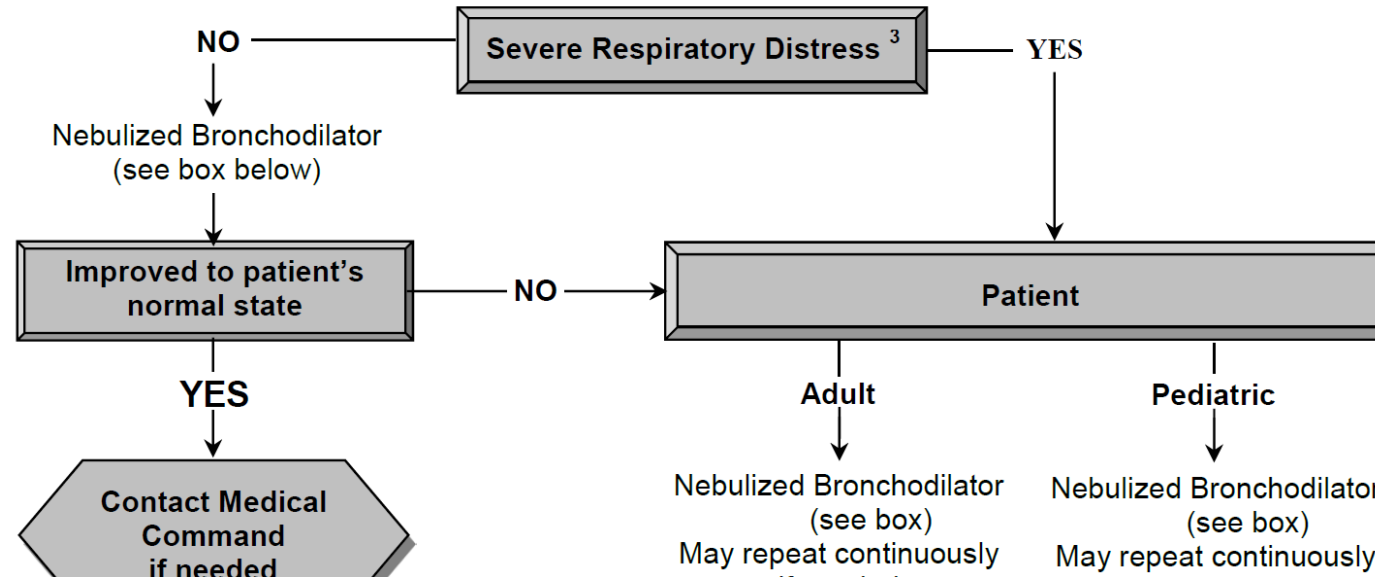
Respiratory

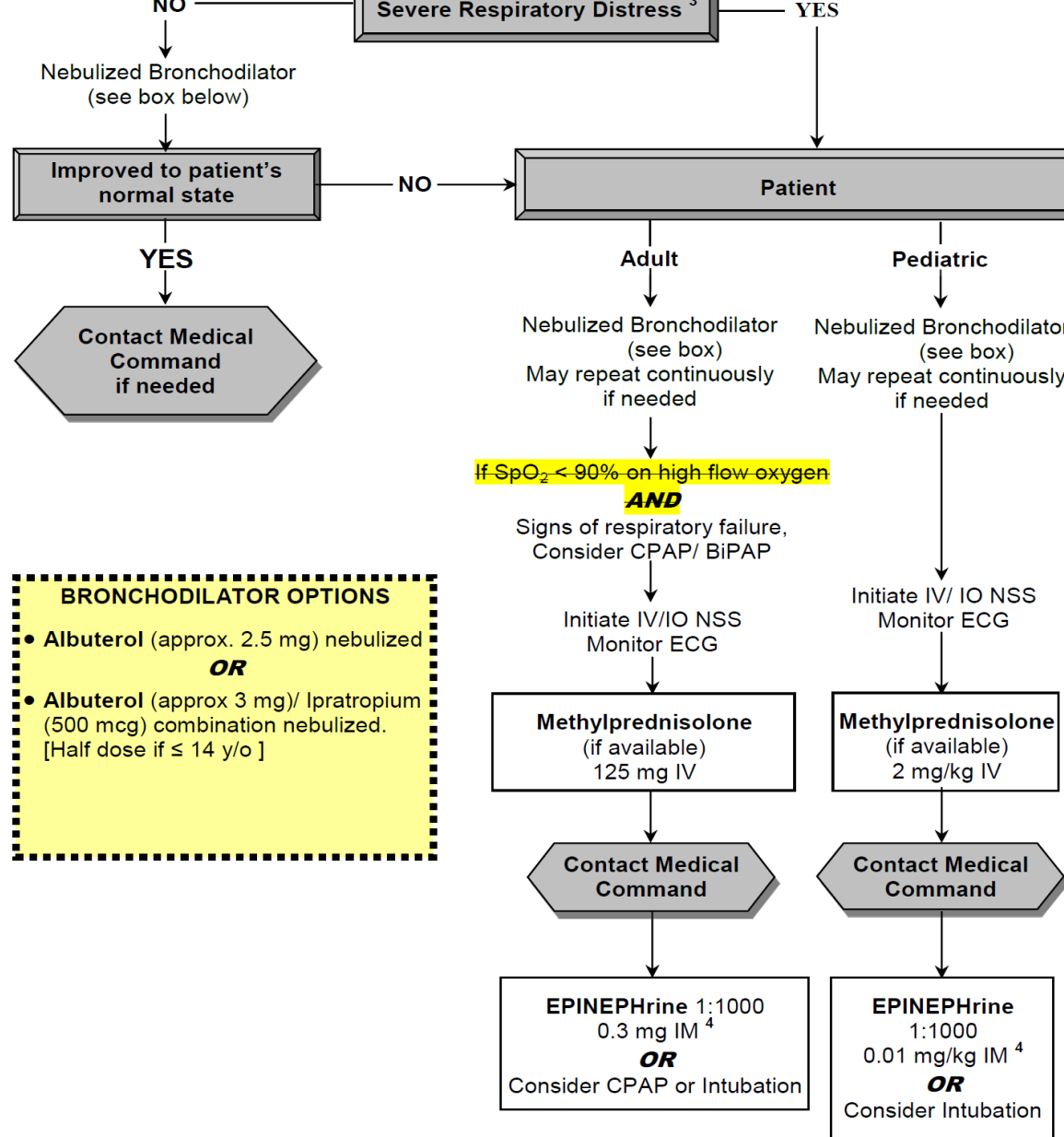
4022 – ALS – Adult/Peds

ASTHMA / COPD / BRONCHOSPASM STATEWIDE ALS PROTOCOL

Initial Patient Contact - See protocol #201

Manage Airway/ Ventilate, if needed ¹
Administer Oxygen ²
Monitor Pulse Oximetry





Suspected ACS

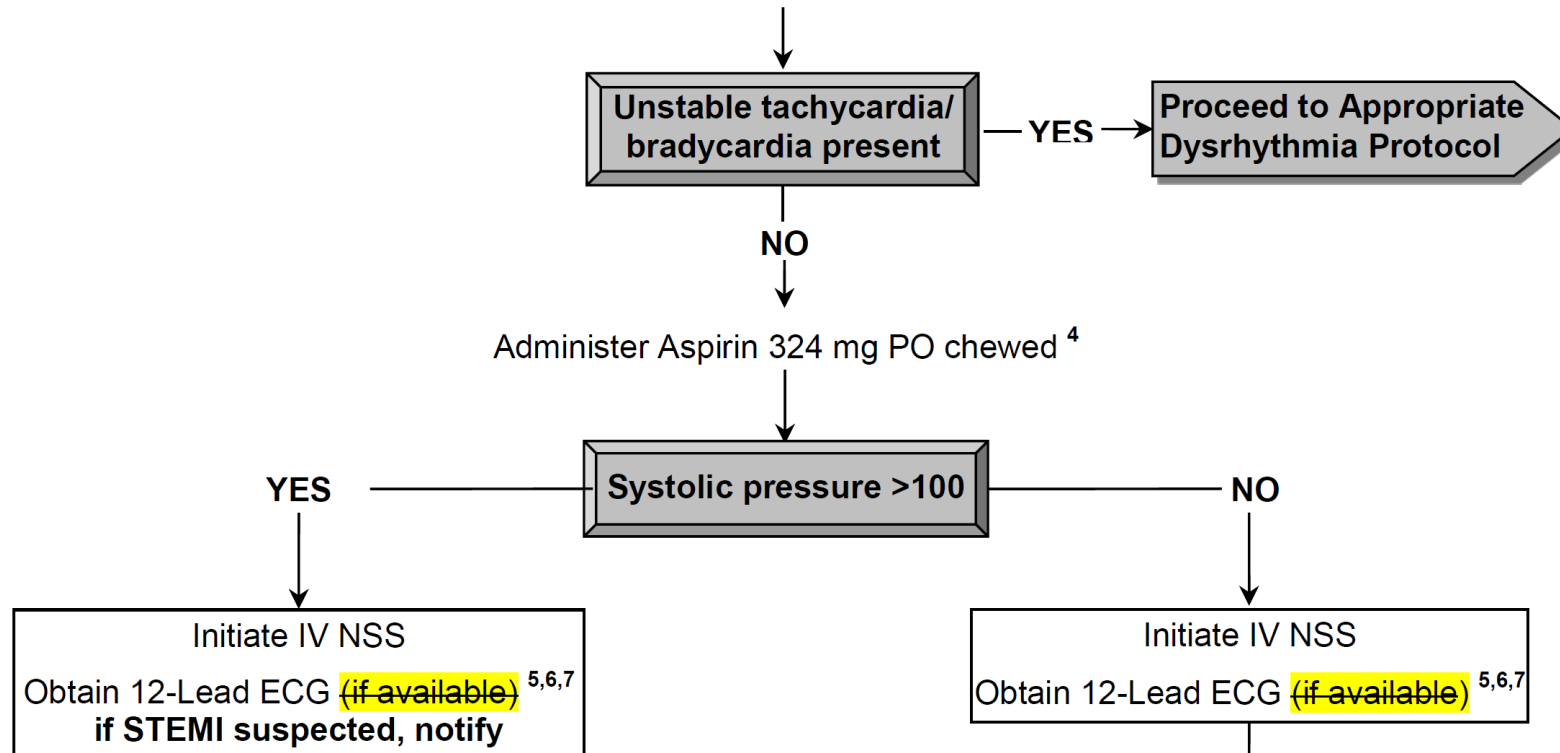
Pennsylvania Department of Health

Cardiac

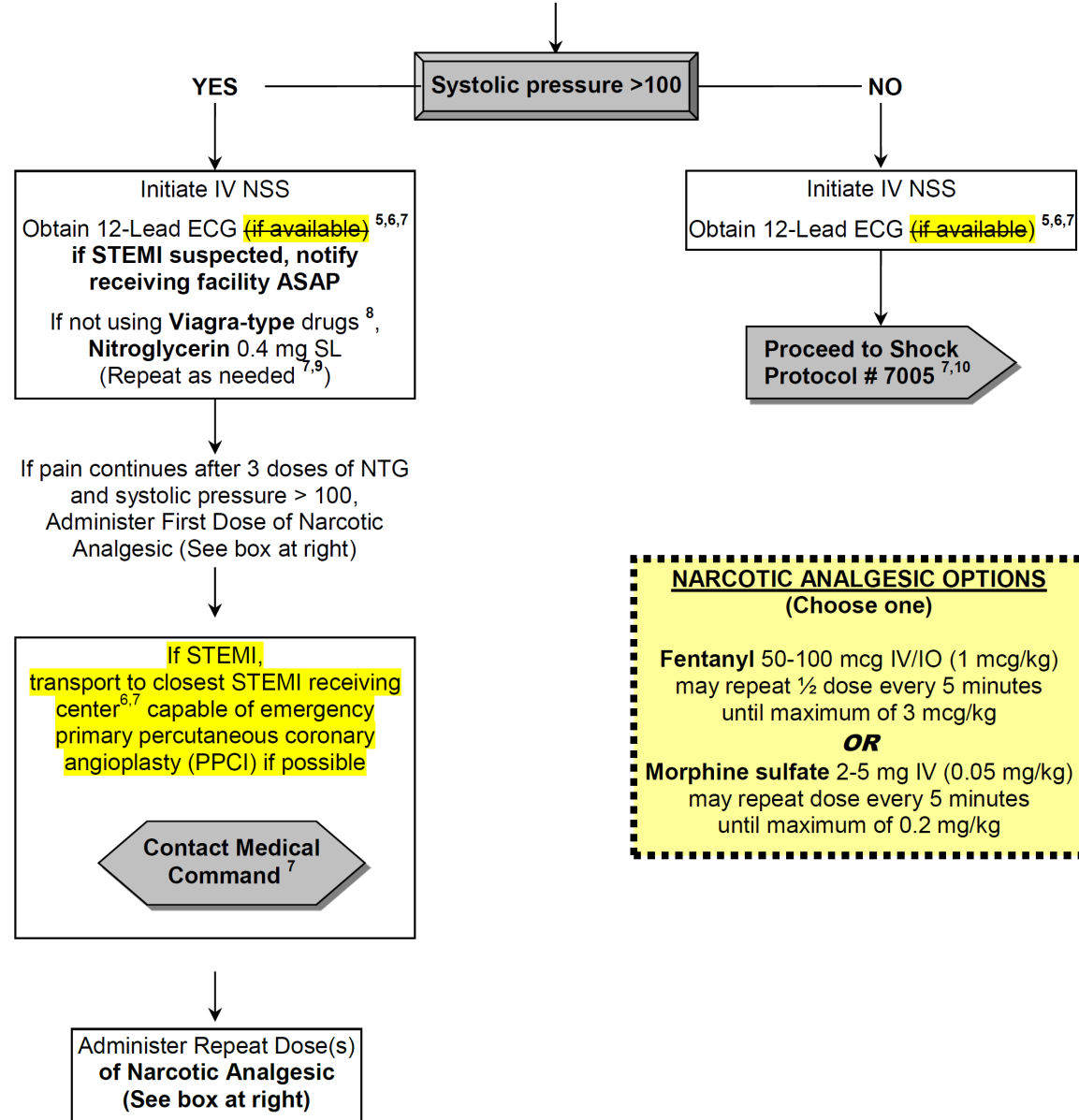
5001 – ALS – Adult

SUSPECTED ACUTE CORONARY SYNDROME STATEWIDE ALS PROTOCOL

Initial Patient Contact – see Protocol #201
Consider non-cardiac causes ^{1,2}
Administer Oxygen titrated to $SpO_2 \geq 94$ ³
Monitor Pulse Oximetry
Monitor ECG



Administer Aspirin 324 mg PO chewed⁴



NARCOTIC ANALGESIC OPTIONS

(Choose one)

Fentanyl 50-100 mcg IV/IO (1 mcg/kg)
may repeat ½ dose every 5 minutes
until maximum of 3 mcg/kg

OR

Morphine sulfate 2-5 mg IV (0.05 mg/kg)
may repeat dose every 5 minutes
until maximum of 0.2 mg/kg

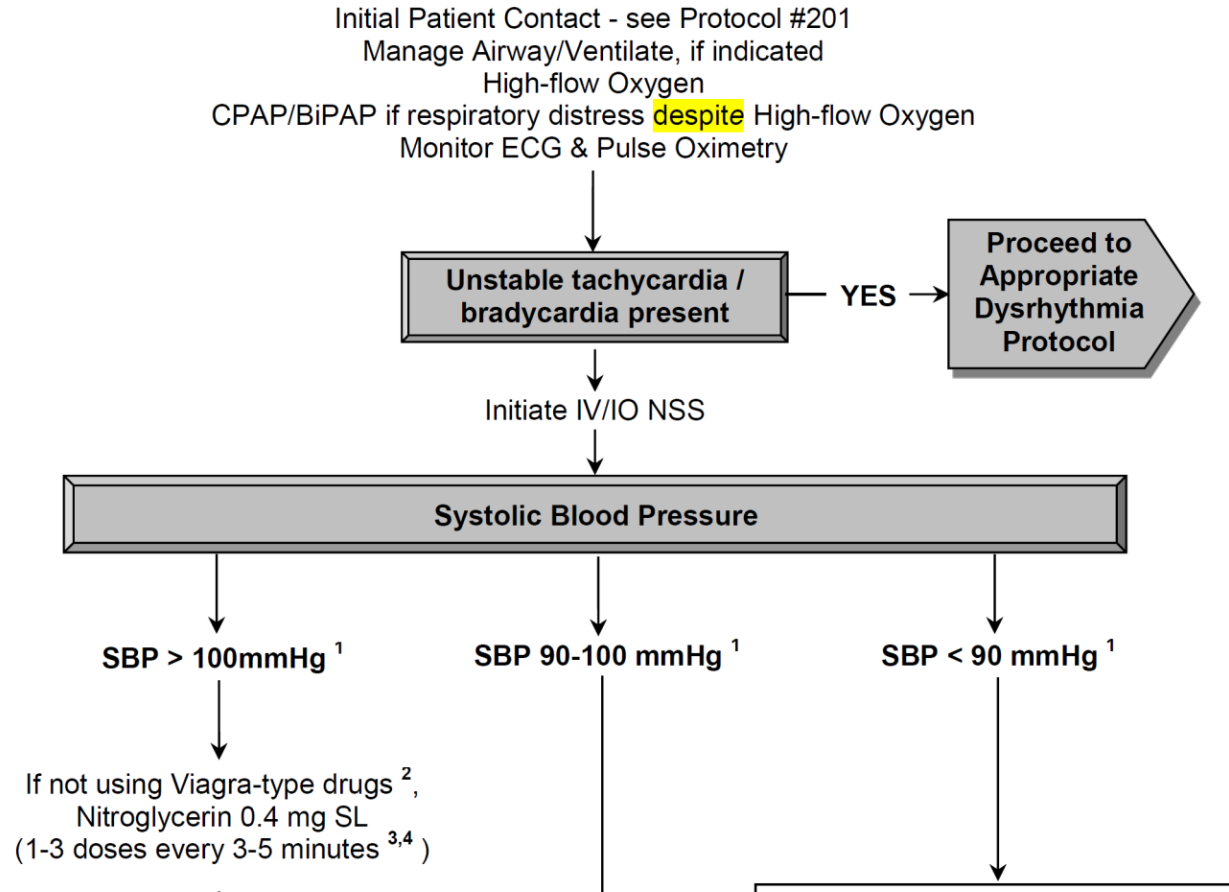
Congestive Heart Failure (CHF)

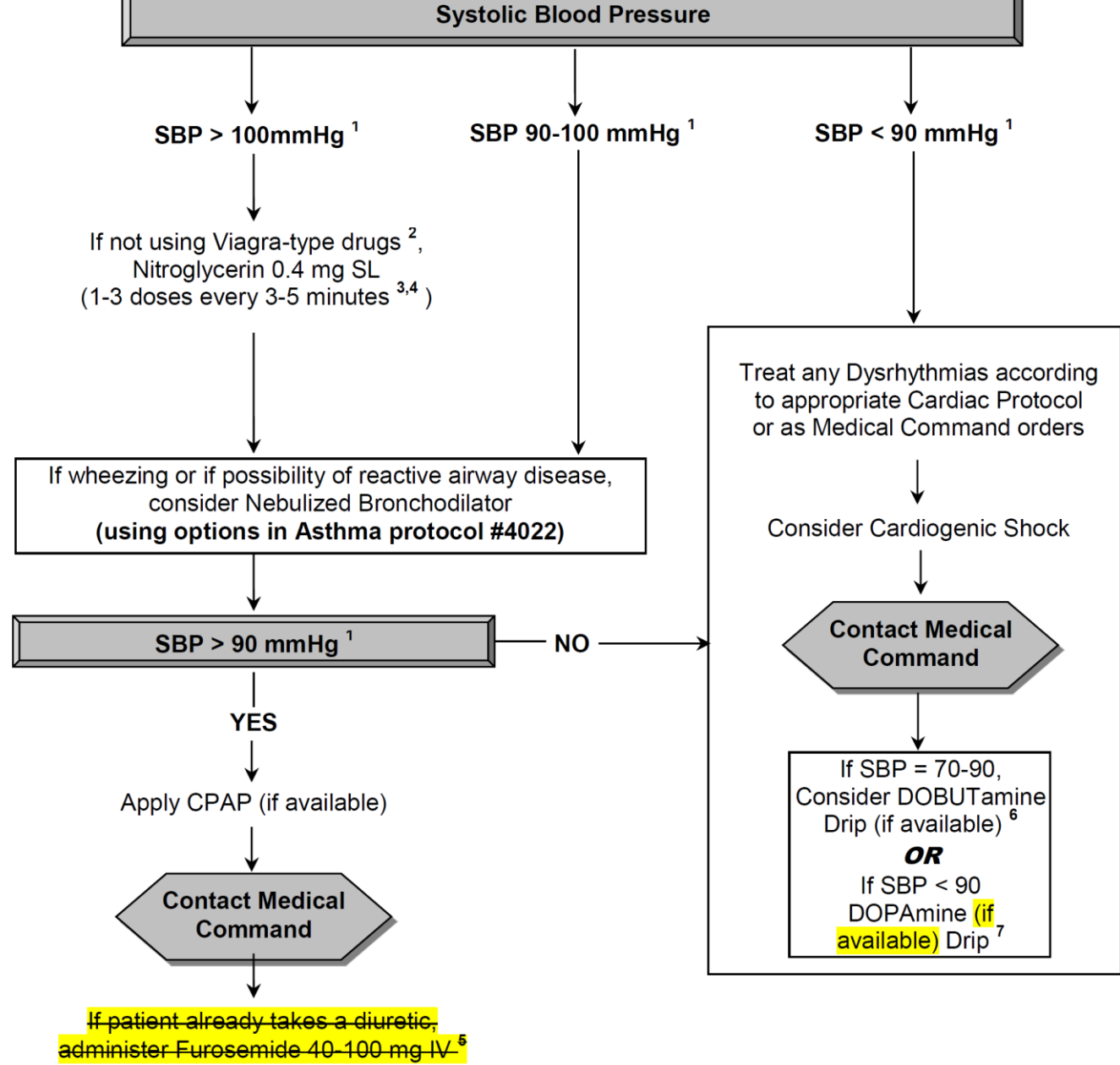
Pennsylvania Department of Health

Cardiac

5002 – ALS – Adult

CONGESTIVE HEART FAILURE STATEWIDE ALS PROTOCOL





Septic shock: The New Hampshire

Septic Shock – Adult

2.20

IDENTIFICATION OF POSSIBLE SEPTIC SHOCK

- Suspected infection – YES
- Evidence of sepsis criteria – YES (2 or more):
 - Temperature < 96.8 °F or > 100.4 °F
 - Heart rate > 90 bpm
 - Respiratory rate > 20 bpm
 - Systolic blood pressure < 90 mmHg OR Mean Arterial Pressure (MAP) < 65mmHg.
 - New onset altered mental status OR increasing mental status change with previously altered mental status
 - Serum lactate level > 4 mmol/L

EMT STANDING ORDERS - ADULT

E

- Routine Patient Care.
- Administer oxygen at a rate to keep oxygen saturation $\geq 94\%$.
- Do not delay transport.
- If positive sepsis screen, notify receiving facility of a “Sepsis Alert”.

ADVANCED EMT STANDING ORDERS - ADULT

A

- Initiate up to two (2) large-bore IVs. Do not delay transport to start IV.
- Rapidly administer 0.9% NaCl to maintain systolic blood pressure > 90mmHg OR MAP > 65mmHg in 500ml boluses every 20 minutes. Total volume should not exceed 4,000ml.
- Patients should be reassessed frequently, with special attention given to the lung examination to ensure volume overload does not occur.

PARAMEDIC STANDING ORDERS - ADULT

- Heart rate > 90 bpm
- Respiratory rate > 20 bpm
- Systolic blood pressure < 90 mmHg OR Mean Arterial Pressure (MAP) <65mmHg.
- New onset altered mental status OR increasing mental status change with previously altered mental status
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PARAMEDIC STANDING ORDERS - ADULT

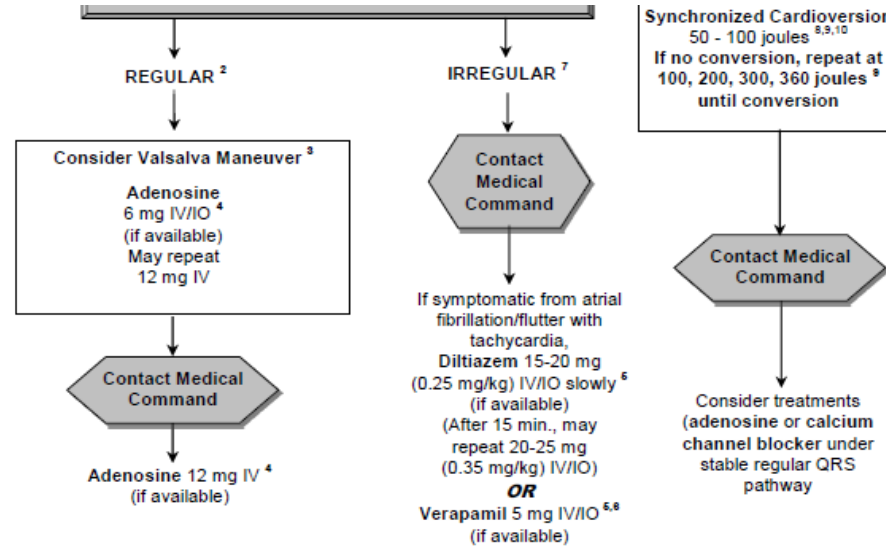
P

- Obtain serum lactate level (if available and trained)
- If there is no response after 2,000 ml IV fluid infused, continue up to 4,000 mL IV fluid and consider:
 - Norepinephrine infusion 1 – 30 microgram/minute (preferred) (Dilute 4mg in 1000 mL 0.9% normal saline for 4 microgram/mL) via pump, **OR**
 - Epinephrine infusion 2 – 10 micrograms/minute (Dilute epinephrine 1mg in 1000 mL 0.9% normal saline for 1 microgram/mL) via pump.

WHY IS ON-LINE MEDICAL DIRECTION USED?

WHY?

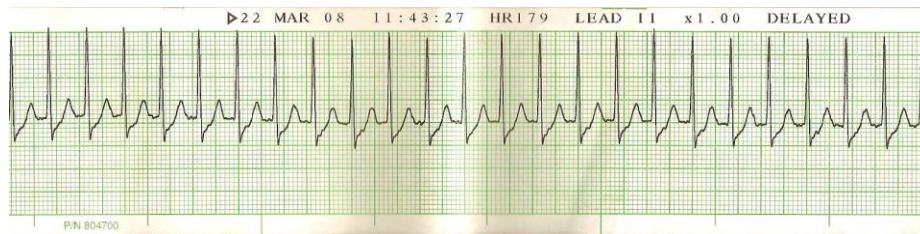
Protocol may require for additional orders



Sedation Options:
(Choose one)
(Titrate to minimum amount necessary)
Midazolam 1-5 mg IV/IO
(0.05 mg/kg) titrated
OR
Diazepam 5-10 mg IV/IO
(0.1 mg/kg) titrated to effect
OR
Lorazepam 1-2 mg IV/IO
0.1 mg/kg, max 2 mg/dose) titrated

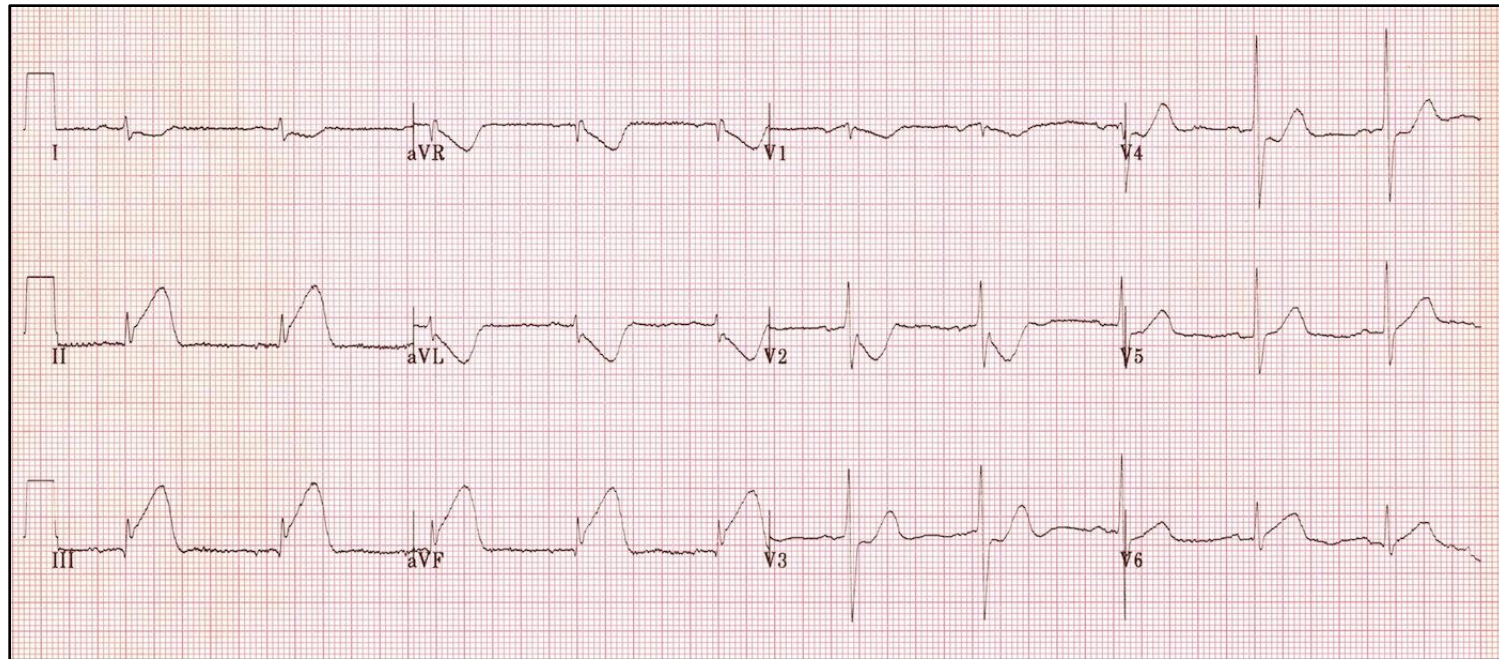
WHY?

Providers may need assistance because circumstances are outside the normal protocols



WHY?

Specialty teams may need to be activated



REASONS FOR ON-LINE MEDICAL DIRECTION

- Protocol may require for additional orders
- Providers may need assistance because circumstances are outside the normal protocols
- Specialty teams may need to be activated

WHO?

The Medical Director of the program is the most highly trained and often the best person to provide on-line medical command, BUT...

WHO?

The Medical Director of the program is the most highly trained and often the best person to provide on-line medical command, BUT...

it is usually not feasible for a Medical Director to be available 24 hours a day, 7 days a week.

ON-LINE MEDICAL COMMAND

Completion of a base station medical command course:

- History of EMS
- Levels of care/Scope of practice
- Protocols
- Resources
- Difficult situations
- Practice scenarios



Online medical direction training



HOW?

Good communications skills are extremely important in order to provide good on-line medical oversight...

HOW?

Be courteous

Be respectful

Ask good questions

Know the protocols (or refer to a copy)

ABOVE ALL, BE HELPFUL

WHERE?

BASE STATIONS: Cornerstone of on-line direction



Radios and/or phones must be immediately available to communicate with EMS providers

Online medical direction model

- Receiving hospital
- Centralized model (Dispatch center)
- Satellite system (Based-hospital)

Online medical direction in Tokyo: Centralized model





WHAT?

DIFFICULT SITUATIONS:

- REFUSAL OF CARE
- PSYCHIATRIC/RESTRAINTS
- DO NOT RESUSCITATE/ADVANCED DIRECTIVES
- TERMINATION OF RESUSC/DEAD ON ARRIVAL
- CHILD ABUSE/ELDER NEGLECT
- PHYSICIAN ON SCENE



US Experience

