

 <p>THE UNIVERSITY OF NEW MEXICO HEALTH SCIENCES CENTER</p>	Clinical Practice Policy and Procedure
	Domain: 6 – Health Systems Class: a – Health system Management NIC #: 7660 – Emergency Cart Checking
University Hospitals	

EMERGENCY CARTS/DEFIBRILLATORS

Primary Age Group: All Ages
 Newborns Pediatrics Adults

POLICY:

It is the policy of the University of New Mexico Health Sciences Center (UNMHSC) Clinical Operations to maintain emergency carts and defibrillators in accordance with the following procedure. This policy does **not** apply to Off-Site Ambulatory Clinics with non-ALS providers (see Policies listed below).

POLICY CROSS REFERENCES:

- NIC # 4U – 6320 “Cardiopulmonary Resuscitation (CPR) and Documentation”
- NIC # 6a – 7660 “Basic Life Support Kits in Offsite Ambulatory Locations”

GENERAL INFORMATION and DESIRED OUTCOME:

1. An emergency cart is a cart that facilitates coordination of emergency equipment. Additionally, a specific crash cart type facilitates staff familiarity with equipment location. The two options on this campus are the Milcare and Pediatric Broselow cart.
2. The purpose of this policy is to ensure a properly stocked emergency cart will be readily available.
3. The purpose of this policy is to also ensure a properly functioning defibrillator will be readily available. There are several models currently being used on this campus. Test loads are listed as per the manufacturer’s guidelines (Appendix VI).
4. A Licensed Staff Member (RN, RT, PT, etc.) as designated by the Manager is responsible for checking the crash cart, oxygen cylinder levels, defibrillator, and documenting compliance on crash cart checklist.
5. Each emergency cart is equipped with a numbered lock and kept locked unless in use. If the lock is not intact, the cart is to be checked and unit personnel will replace any missing supplies. Medication trays and numbered locks are controlled by the

Pharmacy. Pharmacy places a copy of the Adult Emergency Drug Guidelines in the Medication Drawer during stocking.

6. The integrity of the **lock** and **lock number** of the primary cart is checked **every shift** and recorded. Units that do not function on a 24 hours basis will check the integrity of the lock once each workday.
7. Defibrillator **load checks** will be performed **every shift** with the defibrillator **plugged in and unplugged**. Units that do not function on a 24 hour basis will test the defibrillator plugged in and unplugged once each workday. Refer to Appendix VI for test loads.
8. All **cart**s will be **opened** and checked for contents **once monthly** and following each use. Sterile items will be checked for package integrity and expiration date. Items with expiration dates expiring within the month will be replaced. The medication drawer will not be opened if it is sealed and intact.
9. **Laryngoscopes** will be checked prior to placement on the cart and **monthly**. Intubation trays are provided by Central Supply on an exchange basis.
10. Oxygen cylinders are replaced when the tank has < 500 psi. Full tanks are obtained from General Stores on an exchange basis.
11. Pharmacy will check all emergency carts for proper drug storage, stock level, and unit inspection log as determined by Pharmacy policy.
12. The crash cart checklists and test load strips are to be maintained by the Manager for each crash cart for 3 years.
13. Drawers of crash carts are to be clearly labeled to identify contents by general categories (drugs, cardiac/chest procedures, circulation, breathing, and airway). Special procedure trays are kept on the bottom shelf.

EQUIPMENT (essential):

1. Drawers are organized and arranged from top to bottom in the following order medications, airway, circulation, IV solution and tubing, miscellaneous.
2. All units will set up their carts to include adult, pediatric, or newborn equipment, as needed using the appropriate supplies from the appendices I - IV.
3. The pediatric equipment indicated in appendix IV will be maintained for those adult units and patient care areas that routinely see a mixture of pediatric and adult patients. A supply of these pediatric kits will be maintained in PICU/PIC2 and made available for adult areas that do not routinely see pediatric patients.

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4. Transcutaneous pacer carts are kept in the MICU, TSICU, and PICU. One will be brought to all over head paged “Dr. Hearts”.

PROCEDURE:

1. The cart is inspected for the following **External** contents:
 - 1.1. Portable suction apparatus with connecting tubing if not available in each patient’s room.
 - 1.2. Portable monitor/defibrillator unit with charged batteries, multi-function cable, multifunction pads (pedi, adult or both as appropriate), pacer cable (if pacer capable machine), EKG electrodes, appropriate sized paddles (adult, pediatric), defibrillation gel, monitor paper, blood pressure cuff (adult carts), SpO2 probe.
 - 1.3. Sharps container.
 - 1.4. Cardiopulmonary Resuscitation records (Form P-200211- pages 1&2) Appendix VII.
 - 1.5. Emergency Crash Cart Check Sheet. (Form P-200210) Appendix VIII.
 - 1.6. List of cart contents.
 - 1.7. Emergency drug information sheets as appropriate for unit (Appendix V for adults)
 - 1.8. Cardiac board
2. Cart contents according to appropriate appendix.
 - 2.1. Adult - Appendix I
 - 2.2. Pediatric - Appendix II
 - 2.3. Newborn - Appendix III
 - 2.4. Optional pediatric/newborn supplies for adult areas - Appendix IV
 - 2.5. Development of Broselow cart contents and checklist is currently in progress.
3. Replacement of Stock
 - 3.1. Medications
 - 3.1.1. As soon as possible after opening the emergency cart, the master charge sheet, located inside the medication drawer, will have a **patient label** placed in the lower right hand corner of this form. Pharmacy will be called (PCAP from 07:01 - 23:30, inpatient from 23:31 - 07:00) to replace the medication drawer with a new sealed drawer. The used medication drawer will be returned to Pharmacy at this time. Pharmacy will provide the medication drawer restocked and sealed in a clear security wrap. Pharmacy will place a label indicating the name and expiration date of the first medication to expire, the date and initials of the person filling and checking the medication drawer. This label will be affixed to the upper left-hand corner of the drawer.
 - 3.2. Other supplies

- 3.2.1. Items available as floor stock may be pulled from stock as replacement with the exception of medications.
 - 3.2.2. Non stock items are to be ordered from CDU as soon as possible.
4. Once all items have been replaced, the cart will be locked with a new numbered lock by pharmacy. The new lock number will be recorded on the crash cart checklist.
 5. See section in adopted nursing skills text.

AGE OR DEVELOPMENTAL VARIATIONS

- Adult Emergency Crash Cart (Appendix I)
- Pediatric Emergency Crash Cart (Appendix II)
- Newborn Intensive Care Crash Cart (Appendix III)

UNIT OR AREA SPECIFICS

- Adult Emergency Cart, Pediatric Emergency Crash Cart, Newborn Intensive Care Crash Cart as required by patient population.

KEY DOCUMENTATION:

1. The specific contents for each of the three standard code carts (e.g., Adult, Pediatric, Neonatal) are specified in Appendix I-III.
2. Appendix V refers to the required check of the emergency cart.

References:

[Indicate if reference is R = Research; NS = National Standard or L = Literature]

- American Heart Association, Basic Life Support for Healthcare Providers, 1994.
- Sandors AB: The Development of AHA. Guidelines for emergency cardiac care, 1995 - NS.
- Willens JS: Strengthen your life support skills, nursing 93
- Perry, A.G., & Potter, PA (1998). Clinical Nursing skills & Techniques. St. Louis: Mosby

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Domain: 6 – Health System
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Revised Date: 10/97, 2/98, 7/2002
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APPENDIX I
ADULT EMERGENCY MILCARE CART

Drawer 1-Adult Medications

Adenosine 6mg/2ml vial	5
Amiodarone 150mg/3ml ampule	5
Diphenhydramine 50mg/ml vial	1
Epinephrine 1mg/ml 30ml vial	1
Flumazenil 0.5mg/5ml vial	1
Magnesium Sulfate 1gm/2ml vial	2
Methylprednisolone 125mg/2ml	2
Naloxone 0.4mg/ml 1ml ampule	4
Nitroglycerin 50mg/10ml vial	1
Nitroprusside 50mg vial	1
Norepinephrine 4mg/4ml ampule	1
Procainamide 1gm/10ml vial	2
Vasopressin 20U/ml 1ml vial	2
Verapamil 5mg/2ml vial	2
Sodium chloride 0.9% 10ml preservative free vial	3
Dobutamine 500mg/250ml D5W premix drip	1
Dopamine 400mg/250ml D5W premix drip	1
(If pharmacy is unable to obtain premix drips we will stock with:	
2 x 200mg Dopamine vials (40mg/ml 5ml vials)	
2 x 250mg Dobutamine vials (12.5mg/ml 20ml vials)	
Lidocaine 2gm/500ml premix	1
Bristojects: with male luer lock adapters:	
Atropine 0.1mg/ml 10ml syringe	4
Calcium Chloride 100mg/ml 10ml syringe	2
Dextrose 50% 50ml syringe	1
Epinephrine 1:10,000 1mg/10ml syringe	6
Etomidate 2mg/ml 20 ml syringe	1
Lidocaine 2% 20mg/ml (100mg/5ml) syringe	3
Sodium Bicarbonate 1mEq/ml 50ml syringe	2

Drawer 2 - Breathing and Airway (large drawer)

Ambu bag with mask (can attach to cart if bottom shelf needed)
O2 Nasal cannula
O2 Flow meter with adapter (xmas tree)
Oral airways: one each -- 10 mm, 9 mm, 8 mm
Intubation tray (laryngoscope handle, straight and curved blade, 10 cc syringe, lubricant)
1 Stylet
2 C cell batteries
2 Laryngoscope light bulbs
2 Padded tongue blades
1 Roll 1" adhesive tape or pre-made ET tube holder
Skin prep wipes or benzoin
2 pr. exam gloves
1 Yankauer suction catheter
2 #14 suction catheters
Salem sump tube, 16 Fr
Lubricant
Straight connector
Toomey syringe
Endotracheal tubes, 2 each size: 6.0, 7.0, 7.5, 8.0, 8.5, 9.0
Tracheostomy tubes, 1 each size: Adult Shiley Blue Box: #4, #6, #8
Inner Cannulas, 1 size each: Shiley #4, #6, #8
(Portex is discontinued – unless special order for a patient)
1 End-tidal CO2 Detector

Drawer 3 - Circulation: IV supplies (small drawer)

Angiocaths, 2 each: 14G, 16G, 18G, 20G, 22G
2 3-Way stopcocks
Blood tubes: 3 SST, 1 lt. blue, 1 lavender
2 ABG kits, 2 heparinized aspirators
Needles: 6 18G, 6 20G, 6 22G, 3 25G
Alcohol swabs
Tape
Butterflies, 2 each: 21G, 23G, 25G
2 IV start kits
Syringes: 2 TB, 6 3cc, 6 5cc, 6 10cc, 2 20cc, 1 50cc
Non-coring Huber Needles-1 each: 22 ga 1 inch, 20ga 1 inch

Appendix I: Adult

Drawer 4-Circulation: IV solutions and tubing (large drawer)

1 Lactated ringers 1000 ml
2 Normal saline 1000 ml
2 Normal saline 250 ml
2 D5W 500 ml
2 D5W 250 ml

IV Tubing:

2 Macro drip
3 Micro drip
2 Horizon cassettes
2 Extension tubing (needless)
1 Buretrol
1 Blood pump tubing
Armboards: 1 long, 1 short

Drawer 5 - Cardiac, Chest Procedures (large drawer)

6 EKG electrodes
2 Restraints
Sterile gloves, 2 pair each size: small, medium, and large
2 Masks with face shields or masks and eye protection
2 Scalpels with blades
Dressings: 4x4 10 pk, 2 4X4, 2 4X4 drain sponge, 2 2X2
Betadine solution
Sutures, 2 each: 000 silk with needle, 0 silk with needle
Cardiac needle 20 G
Sterile towels
Petroleum gauze
Cutdown tray
3 - lumen CVP catheter kit
Chest tubes, 1 each: 28 Fr, 32 Fr

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**APPENDIX II
PEDIATRIC EMERGENCY MILCARE CART**

Drawer 1 – Pediatric Medications

Adenosine 6mg/2ml vials	3
Calcium Chloride 10% (1gm/10ml) vials	2
Calcium Gluconate 10% (998mg/10ml) vials	1
Diphenhydramine 50mg/ml vial	1
Dobutamine 250mg/20ml vial	1
Dopamine 200mg/5ml vial	1
Epinephrine 1mg/ml ampules	3
Epinephrine 1mg/1ml 30ml MDV	1
Flumazenil 0.5mg/5ml vial	1
Methylprednisolone 40mg vial	1
Naloxone 0.02mg/ml 1ml ampule	1
Naloxone 0.4mg/ml 1ml ampule	2
Norepinephrine 4mg/4ml ampule	1
Sodium Chloride 0.9% vial 10ml flush SDV	4
Atropine 0.5mg/5ml syringe	3
Calcium Chloride 1gm/10ml syringe	1
Dextrose 50% 50ml syringes	1
Epinephrine 1mg/10ml syringes	3
Lidocaine 100mg/5ml syringe	3
Sodium Bicarbonate 1mEq/ml 10ml syringe	3
Sodium Bicarbonate 1mEq/ml 50ml syringe	1

Drawer 2 – Breathing and Airway (small drawer)

Pedi-paddles for those units using Lifepack 6
Endotracheal tubes 2 each: 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, and 6.0
Endotracheal tube 1 each uncuffed: 6.5
Endotracheal tube 1 each cuffed: 7.0, 7.5, 8.0, and 8.5
1 peds intubation tray
1 adult intubation tray
2 peds stylet
2 adult stylet
1 Yankauer
1 roll I≡ tape
2 C batteries
2 Laryngoscope Replacement Bulbs
1 Magill Forceps
1 can stomahesive spray

Appendix II-Pediatric

Drawer 3-Airway/Breathing (large drawer)

Tracheostomy tubes (Shiley) - 1 each size: NEO: 3.0, 3.5
- 1 each size: PED: 3.5, 4.0, 4.5, 5.0, 5.5
Adult & Pedi AMBU bags: 1 each
1 Oxygen flowmeter
Suction Catheters: 1 each size: 6 Fr., 8 Fr., 10 Fr., 14 Fr.
1 Yankauer suction
Nasal airways – 1 each size: 6mm, 8.5mm
Oral airways – 1 each size: 5cm, 6cm, 7cm, 8cm
4 K-Y Gel packets
Butterfly (needle aspiration) kits (2) – kit includes 1 each: 21 Ga. Butterfly
Stopcock
20 cc syringe
Betadine swab

Drawer 4-Circulation (small drawer)

2 Intraosseous (I.O.) needles
Angiocaths – 2 each size: 24 Ga., 22 Ga., 20 Ga., 18 Ga.
2 T-connectors (old style)
2 Horizon tubing
1 Buretrol
1 I.V. filter
2 60 cc syringes
Extension tubing – 2 each size: 30 inch and 60 inch
3 packets 2X2 gauze
3 packets 4X4 gauze
Other I.V. start items: stopcock, clave, tourniquet, alcohol swabs, betadine
3 Tegaderm
1 inch tape
Assorted syringes-4 each: 10cc, 5cc, 3cc, 1cc
Non-coring Huber Needles-1 each size: 22 ga ³/₄ inch, 20 ga 1 inch

Drawer 5-Circulation/Special (small drawer)

I.V.Fluids-1 each: Lactated ringer's 1000cc, Normal Saline 1000cc
Nasogastric Tubes-1 each size: 10fr., 12fr., 14fr.
Toomey syringe
Feeding tubes-1 each size: 5 Fr., 8 Fr. (both 42 inch length)
4 Packets K-Y gel
Flashlight
2 "D" cell batteries
Special sterile instruments: Wirecutters Zoll internal paddles (3 sizes)
Intracardiac needles

Appendix II-Pediatric
Drawer 6-Invasive Procedures (large drawer)

Cutdown Tray
2 4 Fr., 8 cm double lumen CVL
2 5 Fr., 8 cm double lumen CVL
Transvenous pacing set-up
Betadine bottle
2 Packages of sterile O.R. towels
Sterile gloves-2 each size: 6, 6 1/2, 7, 7 1/2, 8
Blades-2 each size: #10, #11, #15
Silk suture-2 each size: 3.0, 4.0
2 Chest tube clamps

Bottom shelf – Large Trays

2 PICU Cardiac arrest trays
2 Rib Spreaders: 1 large, 1 small
Zoll cable (sterile) for internal paddles
Suction set-up
Temporary pacing wires

Top of Cart-Basin

Zoll paste
Multifunction cable
EKG cable
Pacer cable
Multi-function pads-1 each size: adult & pedi (IMPERATIVE: check expiration dates)
2 packs EKG leads (NOT the prewired pediatric leads)
O2 sat (SpO2) probe
2 Rolls Zoll paper
Oxygen wrench

**APPENDIX III
NEWBORN INTENSIVE CARE MILCARE CART**

Drawer 1 – Neonatal Medications

Adenosine 6mg/2ml vials	3
Calcium Chloride 10% (1gm/10ml) vials	2
Calcium Gluconate 10% (998mg/10ml) vials	1
Diphenhydramine 50mg/ml vial	1
Dobutamine 250mg/20ml vial	1
Dopamine 200mg/5ml vial	1
Epinephrine 1mg/ml ampules	3
Epinephrine 1mg/1ml 30ml MDV	1
Flumazenil 0.5mg/5ml vial	1
Methylprednisolone 40mg vial	1
Naloxone 0.02mg/ml 1ml ampule	1
Naloxone 0.4mg/ml 1ml ampule	2
Norepinephrine 4mg/4ml ampule	1
Sodium Chloride 0.9% vial 10ml flush SDV	4
Atropine 0.5mg/5ml syringe	3
Calcium Chloride 1gm/10ml syringe	1
Dextrose 50% 50ml syringes	1
Epinephrine 1mg/10ml syringes	3
Lidocaine 100mg/5ml syringe	3
Sodium Bicarbonate 1mEq/ml 10ml syringe	3
Sodium Bicarbonate 1mEq/ml 50ml syringe	1

Drawer 2 - Respiratory, Airway (small drawer)

Endotracheal Tubes - 4 each: 2.5, 3.0, 3.5, 4.0, and 4.5
2 Stylette
Oral Airways - 1 each: infant, neonatal
CPAP mask: neonate 1, infant 3, pediatric 1
CPAP bag and manometer 1 each
4 Laryngoscope bulbs
2 Feeding tube 8 French
2 Feeding tube 5 French

Drawer 3 - Circulation, Umbilical Catheter Supplies (small drawer)

Umbilical Artery Catheters - 3 each: 3.5, 5.0, and 8.0
Sutures - 3 each: 4-0 silk, 3-0 silk, 4-0 chromic, 3-0 chromic, 5-0 prolene
3 3 - Way stopcocks
3 umbilical tape

Drawer 4 - Circulation, IV Supplies (small drawer)

Syringes: 10 TB, 5 x 3cc, 5 x 5cc, 5 x 10cc, 10 x 20cc, 4 x 60cc
Butterfly Needles: 8 x 25G 3/4 \cong , 4 x 23G 3/4 \cong
Angiocaths 4 each: 24G 5/8 \cong , 22G 1 \cong , 20G 1 1/4 \cong , 18G 1/4 \cong , 16G 2 \cong , 14G 2 \cong
Needles: 8 x 25G, 8 x 22G 1 1/2 \cong , 8 x 20G 1/2 \cong , 8 x 18G 1 1/2 \cong , 8 x 19G filter needle
5 Extension Set (T-Connectors)
3 Arm boards short
Betadine swabs
Alcohol wipes
1 1 \cong roll cloth tape
1 Intraosseous needle
3 3 way stopcocks
I.V. Fluids- 2 each: D5W 100 cc, NaCl 100cc

Drawer 5 - Breathing and Airway (large drawer)

Gloves 3 each: 6 1/2, 7, 8
4X4=s, 2X2=s
1 Betadine
2 Heimlich valve
2 Sterile water 4 oz.
4 Transparent dressing/bioclusive
1 Roll 1 \cong adhesive tape
1 Mini-vol. extension set
2 Straight connectors
2 Y- Connectors
Thoracic Catheters: 2 x 12 Fr, 4 x 10 Fr, 4 x 8 Fr
2 Petroleum Gauze
2 Suture removal kit

Bottom Shelf - Specialized Procedure Trays

2 UAC
2 Neonatal thoracotomy
1 Pedi Pack
1 Peds Cutdown
1 Neonatal tray
1 Water Seal chest drain
2 Sterile Gowns
2 Sterile Towels

Top of Cart

Zoll Paste
Multifunction Cable
EKG Cable
Pacer Cable
2 Pedi Multifunction Pads (IMPERATIVE-Check expiration date)
Zoll Paper
Oxygen tank wrench (On E cylinder)

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**APPENDIX IV
OPTIONAL PEDIATRIC/NEWBORN SUPPLIES
FOR ADULT AREAS**

Pediatric Ambu bag
Pediatric intubation tray
Pediatric stylet
Nasal cannulas: infant and peds
Non-breather mask
Oral airways: 2 child, 2 infant
Endotracheal tubes, 1 each: 3.0, 3.5, 4.0, 4.5, 5.0
Suction catheters: 1 14 Fr, 1 10 Fr, 1 8 Fr, 1 6Fr.
Feeding tubes: 1 x 8 Fr, 1 x 5 Fr
Syringes: 4 x TB, 2 x 20cc
2 Intraosseous needles 15G
4 Angiocaths: 2 x 22G, 2 x 24G
Bulb Syringe
2 blankets
Cord Clamp

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NOTE: THIS DOCUMENT GOES WITH U:\POLPROC\CARTS.DOC

Revised Dates: August 20, 2002
September 17, 1997
October 8, 1997 (F)

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APPENDIX V**

**ADULT EMERGENCY DRUGS
(Based on ACLS guidelines)**

ADENOSINE	Antiarrhythmic in PSVT: 6 mg. rapid IV push, if no response in 1-2 minutes, administer dose of 12 mg., repeat 12 mg. dose a second time if required.
AMIODARONE	Antiarrhythmic: Loading dose: 150mg. Amiodarone IVP (up to 300mg. IVP for cardiac arrest from VF/VT after multiple shocks) for life threatening arrhythmia. Loading dose of 150mg. Amiodarone may be mixed in 100cc D5W and infused over 10 minutes or given IVP. Follow with IV infusion upon arrhythmia resolution. <i>IV infusion:</i> 450mg. Amiodarone in 250ml D5W. Initial infusion 1mg/min-x 6 hours (33ml/hr x 6 hours). Decrease infusion to maintenance dose of 0.5mg./min (17ml/hr).
ATROPINE	Agent used for symptomatic bradycardia, PEA: 0.5-1 mg. IV push, repeat at 3-5 min. Intervals to max. Total dose of .04 mg./kg. May be given via endotracheal route. Stocked 1 mg./10 ml bristoject.
DEXTROSE	Antihypoglycemic: 10 to 25 gms. IVP. Repeat dose as required in severe cases depending on symptoms and blood glucose levels.
DOBUTAMINE	Vasopressor: <i>IV infusion:</i> 500 mg. Dobutamine in 250 ml IV solution. Usual dose 2-5mcg/kg/min. May titrate to upper dose of 20mcg./kg/min. Primarily stimulates B-1 receptors in the heart and is used for inotropic support with mild chronotropic effect. Adequate hydration of patient imperative in blood pressure support. When mixing more than 500mg. Dobutamine in IV solution, equal volume must be removed (e.g. 1gm./40ml Dobutamine, remove 40ml from IV solution).
DOPAMINE	Vasopressor, <i>IV infusion:</i> Usual dose in code situation is 5-20mcg./kg/min. Renal perfusion dosing 2-5mcg./kg/min, increase of cardiac output 5-10mcg./kg/min and peripheral vasoconstriction 10-20mcg./kg/min. As approaching 20mcg./kg/min assess urine output. Extravasation treatment is with phentolamine. Adequate hydration of patient imperative in blood pressure support. Premix drip of 400 mg. Dobutamine in 250 ml IV solution.
EPINEPHRINE	Adrenergic agent of choice for cardiac arrest, vasopressor used in Pulsless VT/VF, Asystole and PEA: 1 mg IV every 3-5 min. Or more frequently. May be given via endotracheal route. Stocked 1 mg./10 ml 1:10,000. If using for hypersensitivity reaction 0.1-0.3 mg. SQ, SIVP.

IV infusion, mix 1 mg. in 250 ml IV solution. Start at 1 mcg./min and titrate up as

needed (1mcg./min = 15cc/hr).

Stocked as 1 mg./1 ml 30ml multidose vials. Bristojects are 1mg/10ml.

ETOMIDATE

Induction of rapid hypnosis (non-barbiturate) usual dose 0.2-0.6mg./kg. IVP immediately prior or during intubation if needed.

FLUMAZENIL

Antidote for benzodiazepine: Initial dose 0.2mg. administered IV over 15 seconds. If desired level of consciousness is not obtained after waiting additional 45 seconds, second dose of 0.2mg. may be administered. Repeat at 60-second intervals as necessary to a maximum total dose of 1mg. Individualize the dose based on patient response. **Use with caution in patients with a history of seizures.**

LIDOCAINE

Antiarrhythmic: Bolus: 1-1.5 mg./kg IV push initial bolus. Repeat doses of 0.5-1 mg./kg. at 5-10 min. intervals if needed until total dose of 3 mg./kg. for cardiac arrest from VF/VT that persists after multiple shocks. May be given via endotracheal route. Follow with IV infusion if effective in arrhythmia resolution.

IV infusion: use-premixed bag of 2 gm. in 500 cc D5W.

1-4 mg./min. (1mg./min = 15cc/hr of premix Lidocaine drip).

MAGNESIUM

In cardiac arrest: 1-2 gm. (diluted in 10ml D5W or NS) IVP in torsades de pointes or when it is suspected that the arrhythmia is caused by a hypomagnesemic state.

NALOXONE

Antidote for opiate narcotics: Initial dose of 0.4mg. to 2mg. IV; may repeat IV at 2 to 3 minute intervals. If no response is observed after 10mg has been administered, question the diagnosis of narcotic induced or partial narcotic induced toxicity. **May also be given IM, SQ or via endotracheal tube.**

NOREPINEPHRINE

Vasopressor, *IV infusion:* mix 4 mg. in 250-cc IV solution (in D5W only). Usual dose 2-12 mcg/min to titrate for blood pressure control. Monitor urine output. **Adequate hydration imperative in blood pressure control.**

PROCAINAMIDE

Antiarrhythmic: Bolus: 100 mg IV every 5 min. (or at a rate of 20mg./minute IVSP) until one of the following observed: 1) arrhythmia suppressed; 2) hypotension ensues; 3) QRS complex is widened by 50% of its original width; 4) a total dose of 17 mg/kg has been given. If effective administer IV infusion.

IV infusion: 1 gm. Procainamide in 250 ml IV solution.

Stocked 1 gm./10 ml.

Range: 1-4 mg./min. (1mg/min = 15cc/hr).

SODIUM BICARBONATE Alkalinizer used in metabolic acidosis: Should be used, if at all, only after application of definitive and better substantiated interventions and drugs. 1 mEq/kg IV push.

Repeat doses are usually 0.5 mEq/kg, based on **ABG results.**

Stocked 1 mEq/1 ml 10ml and 50ml Bristojects.

VASOPRESSIN

Antidiuretic hormone, vasoconstrictor: 40U as a single, **one-time** bolus. Alternative

agent to epinephrine, vasopressin is used in persistent or recurrent VT/VF for vasoconstriction and increasing blood flow to the brain and heart during CPR. Use epinephrine to follow up in 10 minutes if there is no response to vasopressin.

VERAPAMIL

Calcium channel blocking agent, antiarrhythmic: Indications include PSVT, W-P-W syndrome. Initial dose 5 - 10mg. IV push given over 2 minutes. Repeat with 10mg. in 30 min. if initial dose is not adequate. Do not administer concomitantly with IV B-adrenergic blocking agents since both may depress myocardial contractility and AV conduction. Stocked 5 mg./2 ml.

APPENDIX VI

TEST LOADS PER MANUFACTURER'S GUIDELINES FOR DEFIBRILLATORS

M series Zoll: 30 j

Zoll PD 1200: 200 j
(combination pacer/defib/monitor)

Zoll PD 1400: 100 j

Zoll PD 2000: 100 j

Other Models as Labeled by Clinical Engineering



CARDIOPULMONARY RESUSCITATION RECORD

DATE: / /	LOCATION:	SERVICE:
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WITNESSED ARREST RESPIRATORY ARREST
 UNWITNESSED ARREST CARDIAC ARREST

CODE CHRONOLOGY:

Time Code Event Recognized: _____ Time CPR started: _____ Code Team Called? Yes No Time Code Team Called: _____
 Time Code Team Arrived: _____ AED Time: _____ Code Status: _____ Number of shocks: _____

PRESENTING HISTORY RELATED TO CODE (i.e., what triggered event, significant patient history, meds, signs/symptoms): _____

On cardiac monitor prior to arrest? Yes No Intubated Prior? Yes No Admitting Dx: _____
 Glasgow Coma Scale: _____ Spinal Cord Injury Motor Exam Codes: 5 4 3 2 1 0 Pupil Gauge: 3 4 5 6 7 8 (mm) _____ Eyes Open: 4 3 2 1 C
 Pupils: Equal reac Fixed/no reac One pupil dilated/no reac Best Motor Response: 6 5 4 3 2 1 Best Verbal Response: 5 4 3 2 1 Total: _____

RESPIRATORY ASSESSMENT/INTERVENTIONS:

Intubated during code: Yes No Intubated by: _____ Time of intubation: _____ Tube placement: _____ cm @ teeth/gum/nares
 Spontaneous ventilation: Yes No Size of ETT: _____ Oral Nasal Bilateral breath sounds: Yes No
 Airway: ETT LMA MLT Number of Intubation Attempts: _____ If no, when was patient auscultated? _____
 Ambu bag with 100% O₂: Yes No Comments: _____

PRIOR IV STATUS:	INITIATED IV STATUS:	EXTERNAL PACEMAKER USED: <input type="checkbox"/> Yes <input type="checkbox"/> No	PEDS CODE SHEET: <input type="checkbox"/> Yes <input type="checkbox"/> No
IV access <input type="checkbox"/> Yes <input type="checkbox"/> No IO access <input type="checkbox"/> Yes <input type="checkbox"/> No Site: _____	Time: _____ Site: _____ Gauge: _____	Time paced: _____ Rate: _____ MAs: _____ Response: _____	Weight: _____ kgs

Time	Rhythm	Joules	Meds/Dose/Route	Response	Pulse/BP/SpO ₂	CPR	BVM	Fluid Volume	Comments

ABGs	TIME	SITE	PT. FiO ₂	pH	PaCO ₂	PaO ₂	HCO ₃	%SAT	Δ BASE	OTHER LABS

POST ARREST STATUS

Survived <input type="checkbox"/> Family Notified <input type="checkbox"/> Vital Signs: _____ Rhythm: _____ LOC: _____ Transferred to: _____ Time: _____	Expired <input type="checkbox"/> Time: _____ Pronounced by: _____ Family Notified: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Name: _____ By: _____ OMI Notified: <input type="checkbox"/> Yes Time: _____ <input type="checkbox"/> N/A Autopsy Requested: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A By: _____ Donor Services Notified: <input type="checkbox"/> Yes Time: _____ By: _____
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PRINT NAME	SIGNATURE
RECORDER:	
MEDS BY:	
RN LEADER:	
MD LEADER:	
RESP. THERAPIST:	

Pt. Sticker

