

**Intubation:**

Confirm correct endotracheal tube placement by auscultating bilateral breath sounds, confirming absence of epigastric sounds, and monitoring SpO<sub>2</sub>, and ETCO<sub>2</sub> (if available). Visualization of the vocal cords is also an option.

**SpO<sub>2</sub>:**

SpO<sub>2</sub> (pulsatile oxygen saturation) should be monitored on most patients.

**Blood Pressure:**

When BP values appear in a flow chart, it is a systolic value, unless otherwise specified. Example: <90 mmHg represents a systolic blood pressure of less than 90 mmHg.

**Medical Control:**

Contact Medical Control whenever you have a question, a problem arises, or when specified to do so by a flow chart.

**ALS, ILS, and BLS designation:**

Each protocol has either an ALS, ILS, BLS, or ALS/BLS designation placed in the upper right corner. A protocol labeled "ALS Protocol" should only be used by ALS qualified personnel. Protocols labeled "ILS Protocol" should be used by ILS qualified personnel. Protocols labeled "BLS Protocol" should be used by BLS qualified personnel. Protocols labeled "ALS/BLS Protocol" share information to be noted by both ALS, ILS, and BLS personnel YET the clinician should only carry out or perform functions within these protocols they are qualified AND authorized to perform.

**ALS Backup:**

BLS providers may request ALS Backup at their discretion and should request ALS Backup when specified to do so by a flow chart. When requesting ALS Backup, BLS providers should carry out all appropriate BLS measures and begin transporting the patient ASAP while waiting for ALS Backup.

**Footnotes:**

You will find critical details within the footnotes. Read your footnotes. Footnotes appear as numbers within small circles.

**Format:**

A **rectangle** represents process and often asks you to do something. A **diamond** represents a question. The starting and stopping points of a flow chart are **shaded**. Exceptions or issues that come up in a flow chart will move to the right of a flow chart. In most cases the flow will eventually return to the left or main portion of the chart.

**Medical Director:**

Each protocol must be reviewed and approved by the Medical Director overseeing your protocols. Each protocol should be signed by the Medical Director. See the signature/date box in the lower, left corner of each protocol.

# [ Aa ]

<b>A&amp;O, A+O</b>	alert and oriented
<b>A&amp;P</b>	anterior and posterior, auscultation and palpation.
<b>A&amp;P</b>	auscultation and percussion.
<b>A/V</b>	arteriovenous.
<b>AAA</b>	abdominal aortic aneurysm.
<b>ABC</b>	airway, breathing, and circulation
<b>ABCDE</b>	airway, breathing, circ, disability, expose
<b>Abd</b>	abdomen/abdominal
<b>ABG</b>	arterial blood gases.
<b>ABS</b>	arterial blood pressure.
<b>AC</b>	Acromioclavicular (joint), Anticubital
<b>ac</b>	before meals
<b>ACE</b>	angiotensin converting enzyme.
<b>Ach</b>	acetylcholine.
<b>ACLS</b>	advanced cardiac life support.
<b>AD</b>	Right ear
<b>ad lib</b>	as desired
<b>ADH</b>	Antidiuretic hormone
<b>ADL</b>	activities of daily living
<b>adm</b>	admission
<b>AED</b>	automated external defibrillator.
<b>AF</b>	atrial fibrillation, atrial flutter.
<b>Afib</b>	atrial fibrillation.
<b>AFL</b>	atrial flutter
<b>AFP</b>	alpha-fetoprotein
<b>AHA</b>	<u>American Heart Association.</u>
<b>AIDS</b>	acquired immunodeficiency syndrome.
<b>AKA</b>	Also Known As, Above Knee Amputation
<b>ALS</b>	Advanced Life Support
<b>ALT</b>	Alanine aminotransferase (formerly SGPT)
<b>ALVF</b>	acute left ventricular failure.
<b>am</b>	morning
<b>AMA</b>	against medical advice
<b>amb</b>	ambulation
<b>AMI</b>	acute myocardial infarction
<b>amp</b>	ampoule
<b>amt</b>	amount
<b>ANA</b>	antinuclear antibody
<b>ANS</b>	autonomic nervous system.
<b>ANT</b>	anterior.

<b>AP</b>	anterior/posterior
<b>APX</b>	approximant
<b>AQ</b>	water
<b>ARDS</b>	acute/adult respiratory distress syndrome.
<b>ARF</b>	acute renal failure.
<b>AS</b>	Left ear
<b>ASA</b>	Aspirin
<b>ASAP</b>	As Soon As Possible
<b>ASD</b>	atrial septal defect.
<b>ASHD</b>	Atherosclerotic Heart Disease
<b>ASO</b>	Antistreptolysin-O
<b>AST</b>	aspartate aminotransferase (formerly SGOT)
<b>ATF</b>	arrived To Find
<b>ATLE</b>	apparent life threatening event
<b>ATLS</b>	advanced trauma life support
<b>ATS</b>	<u>American Trauma Society.</u>
<b>AU</b>	Both ears
<b>AV</b>	arteriovenous, artificial ventilation, assisted ventilation, atrioventricular.
<b>aVL</b>	unipolar limb lead on the left arm in ecg
<b>AVF</b>	arteriovenous fistula.
<b>ax</b>	auxiliary

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## [ Bb ]

<b>BAB</b>	Babinski's sign.
<b>BAC</b>	blood alcohol concentration
<b>bact</b>	Bacteriology
<b>BAV</b>	bicuspid aortic valve.
<b>BB</b>	beta blocker.
<b>BBB</b>	bundle branch block.
<b>BB/CC</b>	back board and cervical collar
<b>BCLS</b>	Basic Cardiac Life Support
<b>BD</b>	(Lat: bis die) twice a day.
<b>BG</b>	blood glucose
<b>BGL</b>	blood glucose level
<b>BHT</b>	blunt head trauma.
<b>bid</b>	Twice a day
<b>bilat</b>	bilateral.
<b>BKA</b>	Below Knee Amputation
<b>BLQ</b>	both lower quadrants.

<b>BLS</b>	basic life support.
<b>BLS-D</b>	basic life support and defibrillation.
<b>BM</b>	blood monitoring, Bowel Movement
<b>BMR</b>	basal metabolic rate
<b>BO</b>	bowel opening, body odor
<b>BP, B/P</b>	blood pressure
<b>BPH</b>	Benign Prostatic Hypertrophy
<b>bpm</b>	beats per minute.
<b>BS</b>	Bowel Sounds/Breath Sounds/Blood Sugar
<b>BSA</b>	body surface area.
<b>BSS</b>	Balanced Salt Solution
<b>BTLS</b>	basic trauma life support.
<b>BTx</b>	blood transfusion.
<b>Buc</b>	Bucc, buccal.
<b>BUN</b>	Blood Urea Nitrogen
<b>BUQ</b>	both upper quadrants.
<b>BVM</b>	bag-valve-mask.
<b>BX, Bx</b>	Biopsy

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## [ Cc ]

<b>C</b>	Celsius, centigrade, complement
<b>Ca</b>	Calcium
<b>CA, Ca, ca</b>	Cancer, carcinoma
<b>C1...C7</b>	Cervical nerve 1 through 7
<b>C&amp;C</b>	cold and clammy.
<b>C&amp;S</b>	Culture and sensitivity
<b>C/C</b>	chief complaint.
<b>C02</b>	carbon dioxide.
<b>CABG</b>	coronary artery bypass graft.
<b>CAD</b>	coronary artery disease, Computer Aided Dispatch.
<b>CAO</b>	Conscious, Alert, and Oriented
<b>CAPD</b>	continuous ambulatory peritoneal dialysis.
<b>Caps</b>	Capsules
<b>CAT</b>	computer axial tomography
<b>CATH</b>	Catheter
<b>CBC</b>	Complete blood count
<b>c-cath</b>	Cardiac catheterization
<b>c-section</b>	Cesarean Section
<b>c-spine</b>	Cervical Spine
<b>c/o</b>	Complaining of

<b>cc</b>	Cubic centimeter
<b>CCB</b>	calcium channel blocker.
<b>CCF</b>	congestive cardiac failure.
<b>CCU</b>	Coronary Care Unit
<b>CD</b>	caudad, caudal.
<b>CEA</b>	Carcinoembryonic antigen
<b>cg</b>	Centigram
<b>CH</b>	chest.
<b>CHD</b>	coronary heart disease.
<b>CHF</b>	congestive heart failure.
<b>CHR</b>	chronic.
<b>CI</b>	cardiac insufficiency.
<b>CI</b>	cerebral infarction.
<b>CK</b>	Creatine kinase
<b>Cl</b>	Chloride
<b>CLL</b>	Chronic lymphocytic leukemia
<b>cm</b>	Centimeter
<b>CMP</b>	cardiomyopathy.
<b>CNS</b>	central nervous system.
<b>CO</b>	carbon monoxide, cardiac output.
<b>COAD</b>	chronic obstructive airways disease.
<b>Code</b>	Full Cardiac Arrest
<b>COPD</b>	chronic obstructive pulmonary disease.
<b>COMP</b>	Compound
<b>cont</b>	Continued
<b>CO2</b>	Carbon dioxide
<b>CP</b>	cerebral palsy, chest pain.
<b>CPR</b>	cardiopulmonary resuscitation.
<b>CPK</b>	Creatine phosphokinase
<b>CQI</b>	Continuous Quality Improvement
<b>CRF</b>	Chronic Renal Failure
<b>CRVF</b>	congestive right ventricular failure.
<b>CS</b>	cardiogenic shock.
<b>CSF</b>	cerebrospinal fluid.
<b>CT</b>	Computed tomography, cat scan
<b>CTA</b>	clear to auscultation.
<b>CTS</b>	carpal tunnel syndrome
<b>cu</b>	cubic
<b>CV</b>	cardiac volume.
<b>CVA</b>	cerebrovascular accident (stroke).
<b>CX</b>	chest x-ray.
<b>CXPN</b>	chest pain
<b>CXR</b>	chest x-ray

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# [ Dd ]

<b>D&amp;C</b>	dilatation and curettage
<b>D&amp;V, D/V</b>	diarrhoea and vomiting.
<b>D/C</b>	discontinue
<b>d/t</b>	due to
<b>D/W</b>	Dextrose in water
<b>D50W</b>	Dextrose 50% in water
<b>D5W</b>	Dextrose 5% in water
<b>DBP</b>	diastolic blood pressure.
<b>decub</b>	Decubitus ulcer
<b>DIB</b>	Difficulty in breathing
<b>DIC</b>	disseminated intravascular coagulation
<b>DIFF, diff</b>	differential blood count
<b>DIL</b>	dilated.
<b>DIP</b>	distal interphalangeal (joint)
<b>DIST</b>	distal.
<b>DKA</b>	diabetic ketoacidosis.
<b>dl</b>	Decliter (100 ml)
<b>DM</b>	diabetes mellitus.
<b>DNA</b>	Deoxyribonucleic acid
<b>DNR</b>	do not resuscitate.
<b>DO</b>	divisions officer, doctor of osteopathy
<b>DOA</b>	dead on arrival
<b>DOB</b>	date of birth.
<b>DOS</b>	dead on scene
<b>DP</b>	diastolic pressure, Dorsalis pedis
<b>DPT</b>	diphtheria, pertussis, tetanus
<b>drsg</b>	dressing
<b>DSA</b>	Digital subtraction angiography
<b>DT</b>	delirium tremens.
<b>DTR</b>	deep tendon reflex/es.
<b>DU</b>	duodenal ulcer.
<b>DVT</b>	Deep Vein Thrombosis
<b>DX, Dx, dx</b>	diagnosis, discharged, or disease.

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# [ Ee ]

<b>EA</b>	electrical activity.
<b>EAA</b>	effective alveolar air.

<b>EBL</b>	estimated blood loss.
<b>EBM</b>	evidence-based medicine.
<b>ECA</b>	external carotid artery.
<b>ECF</b>	extracellular fluid.
<b>ECG, EKG</b>	electrocardiogram.
<b>ECHO</b>	Echocardiogram
<b>ECT</b>	electroconvulsive therapy.
<b>ED</b>	Emergency Department
<b>EDC</b>	Estimated date of confinement
<b>EDV</b>	end diastolic volume.
<b>EEG</b>	electroencephalogram.
<b>ENT</b>	ear, nose and throat.
<b>EF</b>	ectopic focus.
<b>EMD</b>	Electrical Mechanical Disassociation (Cardiac Arrest)
<b>EMD</b>	Eye Movement Desensitization
<b>EMG</b>	Electromyogram
<b>EMPD</b>	Emergency Medical Priority Dispatch
<b>EMS</b>	emergency medical service.
<b>EMT</b>	emergency medical technician.
<b>EMT-B</b>	Emergency Medical Technician-Basic
<b>EMT-P</b>	Emergency Medical Technician-Paramedic
<b>ENT</b>	Ear, nose, and throat
<b>EPF</b>	epiphyseal plate fracture.
<b>Epi</b>	Epinephrine
<b>ERA</b>	Estroadiol receptor assay
<b>ESR</b>	Erythrocyte sedimentation rate
<b>ET</b>	Endotracheal
<b>ETA</b>	Estimated time of arrival
<b>ETCO2</b>	End Tidal CO2
<b>etiol</b>	Etiology
<b>ETOH</b>	Alcohol
<b>ETT</b>	endotracheal tube.
<b>EUP</b>	eupneic.
<b>eval</b>	Evaluate
<b>exam</b>	Examination
<b>exc</b>	Excision
<b>EXT</b>	extend, extremity

## [ Ff ]

<b>F</b>	fahrenheit, female
<b>FA</b>	forearm
<b>F/U</b>	follow-up

<b>F &amp; E</b>	flexion & extension.
<b>FAQ</b>	frequently asked questions.
<b>FB</b>	foreign body.
<b>FBC</b>	full blood count.
<b>FBS</b>	Fasting blood sugar
<b>FD</b>	Fire Department
<b>FDA</b>	Food and Drug Administration
<b>FDGB</b>	Fall down - Go boom
<b>Fe</b>	iron
<b>flex</b>	flexion
<b>FR</b>	fracture.
<b>FSH</b>	Follicle-stimulating hormone
<b>ft</b>	Foot, feet, (measure)
<b>FTP</b>	Full term pregnancy.
<b>FUO</b>	Fever of undetermined origin
<b>Fx</b>	fracture

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## [ Gg ]

<b>g, gm</b>	gram.
<b>G-tube</b>	gastrostomy tube
<b>G6PD</b>	Glucose-6-phosphate dehydrogenase
<b>GA</b>	general anaesthetic/anesthesia.
<b>gastroc</b>	Gastrocnemius
<b>GB</b>	gallbladder
<b>GC</b>	gonococcus
<b>GCS</b>	Glasgow coma score
<b>GE</b>	gastroesophageal
<b>GERD</b>	gastroesophageal reflux disease
<b>GFR</b>	Glomerular filtration rate
<b>GI</b>	Gastrointestinal
<b>gluc</b>	glucose.
<b>GM</b>	grand mal (epilepsy).
<b>gm</b>	grams
<b>GOA</b>	Gone on arrival
<b>GP</b>	General practitioner
<b>gr</b>	Grain
<b>GRAV, Grav., gravida</b>	a pregnant woman.
<b>GSW</b>	Gunshot wound
<b>gt, gtt, gtts</b>	Drop, drops
<b>GTN</b>	Glyciril tri-nitrate.
<b>GTT</b>	Glucose tolerance test

<b>GU</b>	gastric ulcer.
<b>GU</b>	Genitourinary.
<b>GUM</b>	Genitourinary medicine.external; extremity.
<b>Gyn</b>	gynecology

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## [ Hh ]

<b>H/A</b>	Headache
<b>h20</b>	water
<b>h202</b>	hydrogen peroxide
<b>HAZ MAT</b>	Hazardous materials
<b>Hb</b>	Hemoglobin
<b>Hbp</b>	high blood pressure.
<b>HBV</b>	Hepatitis B Virus
<b>HCG</b>	Human chorionic gonadotropin
<b>HCl</b>	Hydrochloric acid, hydrochloride
<b>HCO<sub>3</sub></b>	bicarbonate.
<b>HCT</b>	hematocrit.
<b>HD</b>	hemodialysis.
<b>HDC</b>	high-dose chemotherapy.
<b>HDL</b>	High-density lipoprotein
<b>HDN</b>	Hemolytic disease of the newborn
<b>HEAR</b>	Hospital Emergency Area Radio
<b>HEENMT</b>	head, eyes, ears, nose, mouth, and throat
<b>HDU</b>	High dependency unit
<b>HF</b>	heart failure.
<b>Hg</b>	Mercury
<b>Hgb</b>	Hemoglobin
<b>HGH</b>	Human growth hormone
<b>HI</b>	Hemagglutination inhibition
<b>HIV</b>	human immunodeficiency virus.
<b>HLA</b>	Human leukocyte antigen
<b>HO</b>	history of.
<b>HO</b>	house officer.
<b>HOCM</b>	hypertrophic obstructive cardiomyopathy.
<b>HOH</b>	hard of hearing.
<b>HPI</b>	history of present illness.
<b>HR</b>	heart rate.
<b>Hr</b>	Hour
<b>HS,hs, h.s.</b>	At bedtime, hour of sleep, and heart sounds.
<b>HSV</b>	herpes simplex virus.

<b>HT. ht</b>	hypertension, height
<b>HTN</b>	hypertension.
<b>HX</b>	History
<b>Hz</b>	Hertz (cycles per second)

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## [ Ii ]

<b>I&amp;E</b>	internal and external.
<b>I&amp;O</b>	Intake and output
<b>I/C</b>	Instructor Coordinator
<b>IABP</b>	Intra-aortic balloon pump
<b>IBD</b>	inflammatory bowel disease.
<b>IBS</b>	irritable bowel syndrome.
<b>IC</b>	intracerebral, Incident Command
<b>ICF</b>	intracerebral fluid, intracellular fluid.
<b>ICP</b>	intracranial pressure.
<b>ICS</b>	intercostal space, Incident Command System
<b>ICU</b>	intensive care unit.
<b>ID</b>	infectious disease, intradermal, Identification.
<b>IDD</b>	insulin dependent diabetes.
<b>IDDM</b>	insulin-dependent diabetes mellitus, (type I)
<b>IF</b>	index finger
<b>IHD</b>	ischemic heart disease.
<b>IHR</b>	intrinsic heart rate.
<b>IHSS</b>	idiopathic hypertrophic subaortic stenosis
<b>IM</b>	intramuscular.
<b>INF</b>	infarction.
<b>inf</b>	Inferior
<b>INJ</b>	injury.
<b>inj</b>	Inject
<b>int</b>	internal.
<b>IO</b>	intraosseous.
<b>IPPB</b>	Intermittent positive-pressure breathing
<b>IPPV</b>	intermittent positive pressure ventilation.
<b>IPS</b>	initial patient survey
<b>IR</b>	internal rotation, incident report
<b>IRE</b>	internal rotation in extension.
<b>IRF</b>	internal rotation in flexion.
<b>irreg</b>	irregular
<b>irrig</b>	irrigation
<b>ISH</b>	isolated systolic hypertension.
<b>ITU</b>	Intensive Therapy Unit.

<b>IU</b>	intrauterine, International unit
<b>IUD</b>	Intrauterine device
<b>IV, I/V</b>	intravenous, intervertebral, intravascular.
<b>IVC</b>	inferior vena cava.
<b>IVDA</b>	intravenous drug abuse
<b>IVP</b>	intravenous push
<b>IVPB</b>	intravenous piggyback
<b>IVSD</b>	interventricular septal defect.
<b>IVU</b>	Intravenous urography

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## [ Jj ]

<b>J</b>	Joule
<b>J-tube</b>	jejunostomy tube
<b>JC</b>	junctional contraction
<b>JR</b>	junctional rhythm
<b>JCT</b>	junction.
<b>JRA</b>	Juvenile rheumatoid arthritis
<b>JT, jt</b>	joint.
<b>JV</b>	jugular vein.
<b>JVD</b>	Jugular Vein Distention
<b>JVP</b>	jugular venous pressure.

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## [ Kk ]

<b>K+</b>	potassium.
<b>KA</b>	ketoacidosis.
<b>kcal</b>	Kilocalorie (food calorie)
<b>kg</b>	kilogram.
<b>KO</b>	keep open.
<b>KUB</b>	Kidneys, ureters, and bladder
<b>KVO</b>	keep vein open

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# [ L ]

<b>L, l, lt</b>	left, Liter
<b>L/min</b>	liters per minute
<b>L/S Spine</b>	lumbar sacral spine
<b>l-spine</b>	lumbar spine
<b>L1...L5</b>	lumbar nerve 1 through 5; lumbar vertebrae 1 through 5
<b>LA</b>	left atrium.
<b>lab</b>	laboratory
<b>Lac</b>	laceration.
<b>LAD</b>	Left anterior descending (coronary artery)
<b>LAP</b>	left atrial pressure.
<b>lap</b>	laparotomy.
<b>LAT</b>	lateral
<b>lb</b>	Pound
<b>LBBB</b>	left bundle branch block.
<b>LBO</b>	large bowel obstruction.
<b>LBP</b>	low blood pressure.
<b>LCA</b>	left coronary artery.
<b>LCTA</b>	lungs clear to auscultation.
<b>LDH</b>	Lactate dehydrogenase
<b>LDL</b>	Low-density lipoprotein
<b>LE</b>	Lupus erythematosus
<b>lg</b>	large
<b>LH</b>	Luteinizing hormone
<b>lido</b>	lidocaine
<b>liq</b>	liquid
<b>LLL</b>	left lower lobe
<b>LLQ</b>	lower left quadrant (abdomen).
<b>LLR</b>	left lateral recumbent
<b>LMP</b>	last menstrual period
<b>LOC</b>	loss of consciousness/level of consciousness (in GCS).
<b>LOI</b>	last oral intake
<b>LPA</b>	left pulmonary artery.
<b>LR</b>	Lactated Ringers Solution
<b>LRQ</b>	lower right quadrant. (abdomen).
<b>LS</b>	lung sounds, lumbosacral.
<b>LUL</b>	left upper lobe
<b>LUQ</b>	left upper quadrant (abdomen).
<b>LV</b>	left ventricle.
<b>LVEDP/V</b>	end-diastolic pressure / volume.
<b>LVF</b>	left ventricular failure.
<b>LVH</b>	left ventricular hypertrophy
<b>lytes</b>	electrolytes

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# [ Mm ]

<b>m</b>	meter
<b>M</b>	Male, Molar, metre.
<b>M/H</b>	medical history.
<b>MAC</b>	macerated.
<b>MAE,</b>	moves all extremities.
<b>MAL</b>	Mid-axillary line
<b>MAOI</b>	monoamine oxidase inhibitor.
<b>MAP</b>	mean arterial pressure.
<b>MAS</b>	meconium aspiration syndrome.
<b>MAST</b>	military antishock trousers.
<b>Max</b>	maximum
<b>MCA</b>	Medical Control Authority
<b>mcg, (µg)</b>	microgram.
<b>MCI</b>	Mass Casualty Incident
<b>MCL</b>	mid-clavicular line
<b>MCV</b>	Mean corpuscular volume
<b>MD</b>	medialis dorsalis, Medical doctor, Muscular Dystrophy
<b>MDI</b>	metered dose inhaler
<b>ME</b>	Medical Examiner
<b>Meds</b>	medication.
<b>MEL</b>	melanoma.
<b>METH</b>	methamphetamine.
<b>mEq</b>	Millequivalent
<b>MF</b>	middle finger
<b>MFR</b>	Medical First Responder
<b>Mg</b>	Magnesium.
<b>mg</b>	milligram
<b>mgu</b>	Microgram
<b>MG</b>	myasthenia gravis. <a href="#">info</a>
<b>MH</b>	medical history.
<b>mHg</b>	millimeter of mercury.
<b>MI</b>	myocardial infarction (Heart Attack).
<b>MICU</b>	mobile intensive care unit.
<b>ML</b>	midline.
<b>Min</b>	minimal
<b>min</b>	minute
<b>ml/mL</b>	milliliter, Microliter
<b>mm</b>	Millimeter
<b>mM</b>	Millimole

<b>mmHg</b>	millimeters of mercury
<b>MMR</b>	Measles, mumps, and rubella
<b>mo</b>	Month
<b>Mod</b>	moderate
<b>mol wt</b>	Molecular weight
<b>MONA</b>	monitor, oxegene, nitro, ASA.
<b>mOsm</b>	Milliosmole
<b>MPI</b>	Multiple Patient Incident
<b>MRI</b>	Magnetic Resonance Imaging
<b>MRSA</b>	methicillin resistant Staphylococcus aureus
<b>MRSE</b>	methicillin-resistant Staphylococcus epidermis
<b>MRSA</b>	Methicillin resistant Staphylococcus aureus.
<b>MS</b>	Multiple Sclerosis, morphine sulfate, mental status
<b>MSΔ</b>	Mental status change
<b>MSH</b>	Melanocyte-stimulating hormone
<b>MSL</b>	midsternal line.
<b>MSP</b>	Motor, sensory, pulse
<b>MUA</b>	manipulation under anaesthesia.
<b>MUGA</b>	Multigated acquisition (scanning)
<b>MVA</b>	Motor vehicle accident
<b>MVC</b>	Motor vehicle crash
<b>MVP</b>	mitral valve prolaps
<b>MVR</b>	mitral valve replacement.

---

## [ Nn ]

<b>N</b>	Nitrogen, normal (strength of solution)
<b>Na</b>	sodium.
<b>N/A, NA</b>	not applicable.
<b>N/V, N&amp;V</b>	nausea and vomiting
<b>N/V/D</b>	nausea / vomiting /diarrhea
<b>Na</b>	Sodium
<b>NaCl</b>	sodium chloride.
<b>NAD</b>	no apparent distress
<b>NAHCO3</b>	sodium bicarbonate
<b>NBS</b>	normal breath sounds.
<b>NC</b>	nasal cannula
<b>NEB</b>	nebulizer
<b>NFR</b>	not for resuscitation.
<b>NG, N-G</b>	nasogastric.

<b>ng</b>	Nanogram (millimicron)
<b>NGT</b>	nasogastric tube.
<b>NH</b>	nursing home
<b>NICU</b>	neonatal intensive care unit.
<b>NIDDM</b>	non insulin-dep. diabetes mellitus,(type II)
<b>NK</b>	not known.
<b>NKA</b>	no known allergies
<b>NKDA</b>	no known drug allergies
<b>NMBA</b>	neuromuscular blocking agent.
<b>NO</b>	nitric oxide.
<b>NOF</b>	neck of femur.
<b>NOK</b>	next of kin.
<b>NP</b>	nurse practitioner.
<b>NPA</b>	Naso-pharyngeal Airway.
<b>NPH</b>	no previous history.
<b>NPO</b>	Nothing by mouth
<b>NRB</b>	non-rebreather mask
<b>NROM</b>	normal range of motion.
<b>NS</b>	normal saline
<b>NSAID</b>	non-steroidal anti-inflammatory drugs.
<b>NSD</b>	nasal septal deformity.
<b>NSD</b>	normal spontaneous delivery.
<b>NSR</b>	normal sinus rhythm.
<b>NTG</b>	nitroglycerin
<b>NTGS</b>	nitroglycerin spray
<b>NTGT</b>	nitroglycerin tablet

---

## [ Oo ]

<b>O&amp;E</b>	observation and examination.
<b>O&amp;T</b>	Operations and training
<b>O/E</b>	on examination.
<b>O2</b>	oxygen
<b>O2Sat</b>	oxygen saturation by pulse oximeter
<b>OB</b>	obstetrics.
<b>OBGYN, Ob-GYN,</b>	Obstetrics and gynecology
<b>OBL</b>	oblique.
<b>OBS</b>	organic brain syndrome
<b>oC</b>	centigrade/Celsius
<b>OCC</b>	occiput.
<b>OD</b>	overdos, right eye.
<b>oF</b>	Fahrenheit

<b>ONC</b>	oncology.
<b>OP, O/P</b>	out patient.
<b>OPA</b>	Oropharyngeal Airway
<b>OPD</b>	outpatient department.
<b>OPQRST</b>	Onset, provoke, quality, radiate, severity, tenderness.
<b>OR</b>	operating room
<b>OS</b>	Osmosis / osmotic, left eye
<b>oss</b>	osseous.
<b>OTC</b>	Over the counter (drug normally obtained w/o a
prescription)	
<b>Oto</b>	otology. (Ear)
<b>OU</b>	both eyes
<b>oz</b>	ounce.

---

## [ Pp ]

<b>p</b>	after
<b>P</b>	Phosphorus, pressure, pulse
<b>P&amp;A</b>	percussion and auscultation
<b>PAC</b>	premature atrial contraction.
<b>PALS</b>	paediatric advanced life support.
<b>PaCO<sub>2</sub></b>	Partial pressure of carbon dioxide in arterial blood
<b>palp</b>	palpate, palpation
<b>PaO<sub>2</sub></b>	partial pressure of oxygen in arterial blood.
<b>Pap</b>	Papanicolaou smear
<b>PASG</b>	Pneumatic Anti-Shock Garment
<b>PAT</b>	paroxysmal atrial tachycardia.
<b>Path</b>	pathology
<b>Pb</b>	lead
<b>pc, p.c.</b>	After meals
<b>PCA</b>	patient controlled analgesia.
<b>PCN</b>	Penicillin
<b>PCO<sub>2</sub></b>	partial pressure of carbon dioxide.
<b>PD</b>	Police Department
<b>PE</b>	pericardial effusion, pharyngoesophageal, pleural effusion, pulmonary embolus.
<b>PEA</b>	pulseless electrical activity (cardiac)
<b>PEAP</b>	positive end airway pressure.
<b>PEARL</b>	pupils equal and reactive to light.
<b>peds</b>	Pediatrics
<b>PEEP</b>	positive end-expiratory pressure.
<b>PEFR</b>	peak expiratory flow rate

<b>per</b>	by or through
<b>PERRL</b>	Pupils equal, round, react to light
<b>pg</b>	Picogram (micromicrogram)
<b>PH</b>	past history, Hydrogen ion concentration
<b>PhN</b>	phrenic nerve.
<b>PHN</b>	pulmonary hypertension.
<b>PHTLS</b>	prehospital trauma life support.
<b>PJC</b>	premature junctional contraction.
<b>PI</b>	personal injury
<b>PID</b>	pelvic inflammatory disease.
<b>PIP</b>	proximal interphalangeal (joint)
<b>PJC</b>	premature junctional contraction
<b>PKU</b>	Phenylketonuria
<b>PM</b>	petit mal, postmortem
<b>pm</b>	afternoon
<b>PMH, PMHx</b>	past medical history.
<b>PMS</b>	pulse/motor/sensory, premenstrual tension syndrome.
<b>PND</b>	paroxysmal nocturnal dyspnoea.
<b>PO</b>	(per os) orally, by mouth.
<b>PO2</b>	Partial pressure of oxygen
<b>poly</b>	prefix for multiple.
<b>post</b>	posterior.
<b>pp</b>	postpartum.
<b>PPH</b>	post-partum hemorrhage
<b>PPMHx</b>	Pertinent past medical history, past medical history
<b>PMS</b>	Pulse/motor/sensory, Premenstrual syndrome
<b>PN</b>	Pain
<b>po</b>	by mouth
<b>PO2</b>	Partial pressure of oxygen
<b>POP</b>	Pain on palpation
<b>post</b>	posterior
<b>post op</b>	postoperative
<b>POV</b>	Privately owned vehicle
<b>PPD</b>	Purified protein derivative (of tuberculin)
<b>ppm</b>	Parts per million
<b>PPTE</b>	Pearson, Place, Time, and Event
<b>PR</b>	pulse rate and per rectum.
<b>pre op</b>	preoperative
<b>prn, p.r.n.</b>	As needed, whenever necessary
<b>Pro time</b>	Prothrombin time
<b>PSH</b>	past surgical history
<b>psi</b>	Pounds persquare inch
<b>PSVT</b>	paroxysmal supraventricular tachycardia.
<b>PT</b>	pneumothorax, Physical therapy
<b>PTCA</b>	percutaneous transluminal coronary angioplasty
<b>Pth</b>	Parathyroid hormone

<b>PTR</b>	patellar tendon reflex
<b>PTSD</b>	Post-Traumatic Stress Disorder
<b>PTX</b>	pneumothorax.
<b>PUD</b>	peptic ulcer disease
<b>PV</b>	per vagina.
<b>PVC</b>	premature ventricular contraction.
<b>PVST</b>	paroxysmal supraventricular tachycardia.
<b>PVT</b>	paroxysmal ventricular tachycardia.
<b>PWD</b>	Pink, Warm, and Dry
<b>PX</b>	prescription.

---

## [ Qq ]

<b>q</b>	every
<b>q2h</b>	every 2 hours
<b>q4h</b>	every 4 hours
<b>q6h</b>	every 6 hours
<b>q8h</b>	every 8 hours
<b>q12h</b>	every 12 hours
<b>QD, qd</b>	every day.
<b>QH, qh</b>	every hour
<b>qid</b>	four times a day
<b>QMI</b>	Q-wave myocardial infarction.

---

## [ Rr ]

<b>R</b>	Respirations, roentgen, right
<b>R/O</b>	Rule out
<b>RA</b>	Rheumatoid arthritis
<b>RAIU</b>	Radioactive iodine uptake
<b>RAP</b>	right atrial pressure.
<b>RBBB</b>	right bundle branch block.
<b>RBC</b>	red blood cells/count.
<b>RCA</b>	right coronary artery.
<b>RCM</b>	right costal margin.
<b>RDS</b>	respiratory distress syndrome.
<b>reg</b>	regular
<b>REM</b>	rapid eye movement.

<b>resp</b>	respiration
<b>RF</b>	Rheumatic fever, rheumatoid factor
<b>Rh</b>	Rhesus blood factor
<b>Rh neg. (Rh-)</b>	Rhesus factor negative
<b>Rh pos. (Rh+)</b>	Rhesus factor positive
<b>RLL</b>	right lower lobe
<b>RLQ</b>	right lower quadrant (abdomen).
<b>RML</b>	right middle lobe
<b>RN</b>	registered nurse.
<b>RNA</b>	Registered Nursing Assistant, Ribonucleic acid
<b>ROM</b>	Range of motion (of joint)
<b>RR</b>	respiratory rate.
<b>RSCN</b>	Registered Sick Children's Nurse.
<b>RSI</b>	rapid sequence intubation.
<b>RSI</b>	repetitive strain injury
<b>RSR</b>	regular sinus rhythm.
<b>RSV</b>	respiratory syncytial virus.
<b>RTA</b>	road traffic accident.
<b>RTI</b>	respiratory tract infection.
<b>RTS</b>	Revised Trauma Score
<b>RUL</b>	right upper lobe
<b>RUQ</b>	right upper quadrant (abdomen).
<b>RVF</b>	right ventricular failure.
<b>RVH</b>	right ventricular hypertrophy.
<b>Rx</b>	Prescription

## [ Ss ]

<b>s*</b>	Without
<b>S&amp;S</b>	signs and symptoms.
<b>S/L</b>	sublingual.
<b>s/p</b>	status post
<b>S/S</b>	signs and symptoms
<b>S1...S5</b>	sacral nerves 1 through 5; sacral vertebrae 1 through 5
<b>SA</b>	sinoatrial.
<b>SAH</b>	subarachnoid hemorrhage.
<b>SAL</b>	saline.
<b>SAMPLE</b>	Signs/Symptoms, Allergies, Meds, PPMHx, last oral
intake, and	events preceding the incident.
<b>SaO2</b>	Systemic arterial oxygen saturation (%)

<b>SBE</b>	Subacute bacterial endocarditis
<b>SC, s.c.</b>	subcutaneous.
<b>SCI</b>	spinal cord injury.
<b>sec</b>	second
<b>SI</b>	sacroiliac (joint)
<b>SIADH</b>	Syndrome of inappropriate antidiuretic hormone
<b>SIDS</b>	Sudden Infant Death Syndrome
<b>SK</b>	streptokinase.
<b>SL</b>	sublingual.
<b>SLE</b>	Systemic lupus erythmatosus
<b>sm</b>	small
<b>SMBG</b>	self-monitored blood glucose
<b>SNS</b>	sympathetic nervous system.
<b>SNT</b>	soft non tender
<b>SOB</b>	shortness of breath.
<b>SOG</b>	standard operation guidelines.
<b>SOP</b>	standard operating protocol / procedure.
<b>sp gr</b>	Specific gravity
<b>spec</b>	Specimin
<b>SpO2</b>	oxygen saturation by pulse oximeter
<b>SQ,subq</b>	subcutaneous
<b>ss*</b>	One-half
<b>ST</b>	sinus tachycardia
<b>STAT, stat</b>	Immediately, at once
<b>STD</b>	sexually transmitted disease.
<b>STI</b>	systolic time intervals.
<b>SV</b>	stroke volume.
<b>SVE</b>	supraventricular extrasystole.
<b>SVT</b>	supra ventricular tachycardia
<b>SX</b>	Symptom
<b>syncopal</b>	Fainting spell
<b>Sz</b>	seizures

## [ Tt ]

<b>T</b>	Temperature; thoracic, followed by the vertebra number.
<b>T&amp;A</b>	Tonsillectomy and adenoidectomy
<b>T&amp;C</b>	Type and crossmatch
<b>T-spine</b>	thoracic spine
<b>T1...T12</b>	thoracic nerves 1 through 12; thoracic vertebrae 1 through
<b>12</b>	
<b>tab</b>	tablet

<b>TB</b>	tuberculosis.
<b>TBSA</b>	total body surface area.
<b>tbsp</b>	tablespoon
<b>TCA</b>	Time since collapse.
<b>TCT</b>	thrombin clotting time.
<b>td</b>	tetanus-diphtheria toxoid
<b>Tele</b>	telemetry
<b>temp</b>	Temperature
<b>TIA</b>	transient ischemic attacks
<b>TIBS</b>	Total iron-binding capacity
<b>tid</b>	three times a day
<b>TKO</b>	to keep open
<b>TMA</b>	transmetatarsal amputation.
<b>top</b>	topically.
<b>TCP</b>	transcutaneous pacing
<b>TMJ</b>	Temporo mandibular joint
<b>TPA</b>	Tissue plasminogen activator
<b>TPN</b>	Total parenteral nutrition
<b>TPR</b>	temperature, pulse, respirations.
<b>trach</b>	tracheal/tracheostomy
<b>T-set</b>	tracheotomy set.
<b>TSH</b>	thyroid-stimulating hormone
<b>tsp</b>	Teaspoon
<b>TSS</b>	toxic shock syndrome.
<b>TT</b>	testicular torsion.
<b>TT</b>	thrombolytic therapy.
<b>TT</b>	transtracheal.
<b>TTB</b>	third trimester bleeding.
<b>TTI</b>	transtracheal insufflation. (Cricothyroidotomy)
<b>Tx</b>	Treatment

## [ Uu ]

<b>U</b>	Units
<b>U&amp;Es</b>	urea and electrolytes.
<b>UA</b>	unstable angina, upper airway.
<b>UAO</b>	upper airway obstruction.
<b>UAP</b>	unstable angina pectoris.
<b>UC</b>	ulcerative colitis.
<b>UC</b>	unconscious.
<b>UD</b>	ulnar deviation.
<b>UE</b>	upper extremity.

<b>UHF</b>	ultra high frequency.
<b>UGI</b>	upper gastrointestinal
<b>ULQ</b>	upper left quadrant.
<b>ultra</b>	ultrasound.
<b>umb</b>	umbilicus (navel).
<b>ung</b>	Ointment
<b>UNK</b>	unknown.
<b>UOA</b>	upon our arrival
<b>UR</b>	Unremarkable
<b>URI</b>	upper respiratory tract infection.
<b>URQ</b>	upper right quadrant.
<b>US</b>	ultrasound, United States
<b>USPHS</b>	United States Public Health Service
<b>UTI</b>	urinary tract infection.
<b>UTL</b>	unable to locate
<b>UV</b>	ultraviolet.

---

## [ Vv ]

<b>VAC</b>	ventriculoatrial conduction.
<b>Vac</b>	Vacuum.
<b>VBG</b>	venous blood gas.
<b>VC</b>	vital capacity.
<b>VD</b>	venereal disease.
<b>VDRL</b>	Veneral Disease Research Laboratory (test for syphilis)
<b>vent</b>	ventilator
<b>VF</b>	ventricular fibrillation, ventricular flutter.
<b>V-fib</b>	Ventricular fibrillation.
<b>VHD</b>	ventricular heart disease.
<b>VPC</b>	ventricular premature contractions.
<b>VS, vs</b>	vital signs.
<b>VSD</b>	ventricular septal defect.
<b>VT, V-tach</b>	ventricular tachycardia.
<b>VTE</b>	venous thromboembolism.

---

## [ Ww ]

<b>W&amp;D</b>	warm and dry
<b>w/</b>	with
<b>w/o</b>	with/out
<b>WBC</b>	white blood cell, white blood cell count.
<b>WHO</b>	World Health Organization
<b>WNL</b>	within normal limits
<b>WPWS</b>	Wolf-Parkinson White Syndrome.
<b>wt</b>	weight.

---

## [ **Xx** ]

<b>X</b>	multiplied by, times.
<b>XR</b>	x-ray.
<b>XRT</b>	radiotherapy.

---

## [ **Yy** ]

<b>Y/O, y/o</b>	years old.
<b>Yd.</b>	yard.
<b>yoa</b>	years of age.
<b>YOF</b>	Year old female
<b>YOM</b>	Year old male
<b>yr</b>	year.

---

## [ **Zz** ]

# [ Misc. Symbols ]

@	at
>	Greater than
<	Less than
?	questionable
+	positive
-	negative
^	approximately
>	greater than
<	less than
=	equal
~	approximate
↑	higher or increased
↓	lower or decreased
1°	primary
2°	secondary
Δ	change
♀	female
♂	male
ĉ	with
ŝ	without
â	before
p	after
/	per

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## ALS Treatment Protocols

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- Asystole and PEA
- Bradycardia
- Hypotension, Shock, Acute Pulmonary Edema
- Tachycardia with adequate perfusion
- Tachycardia with pulses
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### PALS ACLS

- Basic Life Support
- Bradycardia with poor perfusion
- Tachycardia with poor perfusion
- Pulseless Arrest

### Abdominal Pain

### Airway Management

### Altered Mental Status/Coma

### Amputation

### Anaphylaxis

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### Cardioversion

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### Combitube SA

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### Intubation: Orotracheal

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### Neonatal Resuscitation

### Neonatal Resuscitation: Medications

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### Overdose: Barbiturate

### Overdose: Carbon Monoxide

### Overdose: Narcotic

### Overdose: Organophosphate

### Overdose: Tricyclic

### PASG Criteria

### Patient Care

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### Refusal of Care

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### Vaginal Bleeding

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## **BLS Treatment Protocols**

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Overdose: Narcotic  
Overdose: Organophosphate  
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Vaginal Bleeding

## **Intermediate Treatment Protocols**

Airway Management  
Altered Mental Status  
Amputation  
Anaphylaxis  
Burns  
Chest Pain  
Drowning  
Hyperthermia  
Hypothermia

Overdose and Poisoning  
Overdose: Narcotic  
Seizure  
Shock  
Stroke/ CVA  
Syncope  
Trauma General Management  
Vaginal Bleeding

DRUG NAME	DRUG CLASSIFICATION
Acetaminophen	A
Activated Charcoal ( No Sorbitol)	C
Adenosine	A
Albuterol/ Atrovent (DuoNeb)	A
Albuterol	A
Amiodarone	A
Aspirin	A
Atropine	A
Benadryl	A
Calcium Chloride	A
Dextrose 50%	A
Diltiazem	A
Dopamine	C
Droperidol: Chemical restraint	A
Droperidol: Nausea	A
Epinephrine	A
Etomidate	A
Furosemide	A
Glucagon	A
Glucose: Oral	A
Haloperidol	A
Ipecac	C
Ketorolac	A
Lidocaine	A
Lorazepam	A
Magnesium Sulfate	A
Midazolam	A
Morphine Sulfate	A
Narcan	A
Nitroglycerine	A
Oxygen	A
Oxytocin	C
Promethazine	A
Rocuronium	A
Sodium Bicarbonate	A
Succinylcholine	A
Thiamine	A
Vasopressin	A

**A**: May be given when appropriate without contacting Medical Control.

**B**: Certain circumstances may require contact with Medical Control prior to administration.

**C**: Contact with Medical Control is required prior to administration.