Welcome to the School of Nursing at the Johns Hopkins University!

As a faculty who coordinates one of your first semester courses I am making available to you some helpful and useful information. I have included it below for your reading pleasure! There are two documents: the "***B.U.R.P.S.***" list (***Building and Understanding Roots, Prefixes and Suffixes***) and ***Talk like a Nurse***. This document lists many (not all) of the medical terms used in your first semester classes and I believe will ease your transition into a new way of speaking.

THE B.U.R.P.S LIST

Purpose: To become proficient in **B**uilding and **U**nderstanding **R**oots, **P**refixes and **S**uffixes

Rationale: Building and understanding medical terminology is simpler when the words are broken down into roots, prefixes and suffixes.

Steps:

- Review the B.U.R.P.S. tables and try to determine the definitions of the examples
- Notice the overlap among the three groups of roots, prefixes and suffixes
- Make new words by changing one part of the word. For example, if an appendectomy is the removal of the appendix, then a nephrectomy is the removal of a kidney. Tachycardia is a fast heart rate and tachypnea is a fast respiration rate.

Helpful Note: R/T means "related to"

TALK LIKE A NURSE

Purpose: To become familiar with acronyms commonly used by health care providers

Rationale: Different professions have unique languages; medicine and nursing are no exceptions. The acronyms below are used in verbal and written communication in health care settings.

Steps:

- Review the attached list of acronyms (then you can start to critique shows like "*House*" and "*Gray's Anatomy*" for accuracy!)
- Notice that some acronyms have two different meanings; e.g., ROM stands for "range of motion" and "rupture of membranes" - be careful when using abbreviations
- Take the Self Assessment after reading the approved terms, found in Blackboard

NOTE: *All institutions have a list of accepted and "do not use" abbreviations. Always check with the institution before using an abbreviation.*

THE B.U.R.P.S LIST

I. Roots
R/T Body Parts

Root	Meaning	Example(s)
Angi(o), Vas(o)	Blood vessel	Angioplasty, vasoconstriction
Brachi(o)	Arm	Brachial
Bucc(o)	Cheek	Buccal
Cardi(o)	Heart	Cardiopathy
Carp(o)	Wrist	Carpal tunnel syndrome
Cephal(o)	Head	Cephalic
Colp(o)	Vagina	Colposcopy
Crani(o)	Skull	Craniotomy
Cyst(o)	Bladder	Cystoscopy, cystitis
Cyto	Cell	Cytology, cytomegaly
Dactyl(o)	Finger, toe	Polydactyly
Encephal(o)	Brain	Encephalitis
Enter(o)	Intestine	Enteritis
Gloss(o)	Tongue	Glossitis, glossopharyngeal
Hemo, sanguin(o)	Blood	Hemolytic, serosanguinous
Hyster(o)	Womb, uterus	Hysterectomy
Mast(o), mamm(o)	Breast	Mastitis, mammography
Men(o)	Month, r/t menses	Menopause, menarche, dysmenorrheal
Nephr(o), Ren(o)	Kidney	Nephrectomy, renal
Oophor(o)	Ovary	Oopherectomy
Ophthalm, Ocul(o)	Eye	Ophthalmoscope, ocular
Ot(o), Auri, Aud	Ear	Otitis, auricle, audiometer
Phleb(o), Ven(o)	Vein	Phlebitis, venous
Pod	Foot	Podiatrist
Rhin(o)	Nose	Rhinoplasty, rhinorrhea
Salping(o)	Fallopian tube	Salpingectomy, salpingitis
Thorac(o)	Chest	Thoracotomy, thoracic
Thromb(o)	Clot	Thrombosis, thrombolytic

Other Roots

Root	Meaning	Example(s)
Gluc(o)	Sweet, sugar	Glucose, glucometer
Hydr(o)	Water	Hydrocephalus, hydrophobia
Lact(o)	Milk	Lactosuria, lactating
Lip(o), adip(o)	Fat	Lipoma, adipose
Therm	Heat	Hyperthermia

II. Prefixes
R/T Colors

Prefix	Meaning	Example(s)
Erythr(o)	Red	Erythema, erythrocyte
Leuk(o), leuc(o)	White	Leukocytes, leukemia
Cyan(o)	Blue	Cyanosis
Melan(o)	Black	Melanin
Cirrh(o)	Yellow	Cirrhosis

R/T Descriptions

Prefix	Meaning	Example(s)
Ankyl(o)	Stiff, fixed, crooked	Ankylosis
Sten(o), Stric	Narrow	Stenosis, stricture
Ortho	Straight position	Orthopnea, orthopedic
Kypho	Bent, crooked	Kyphoscoliosis, kyphosis
Pseudo	False	Pseudostrabismus, pseudoaneurysm

R/T Measurements

Prefix	Meaning	Example(s)
Macro	Large	Macrophage, macrocephaly
Micro	Small	Microscopic, microorganism
Poly, Hyper, Multi	Many, much	Polydypsia, hyperthyroidism, multiple
Brady	Slow	Bradypnea
Tachy	Fast	Tachycardia
Oligo, Hypo	Few	Oliguria, hypothermia
Iso	Equal	Isometric, isotonic
Diplo, Ambi	Both, double	Diplopia, ambidextrous
Hemi	Half	Hemiplegia, hemisphere
Pan	All	Pansystolic, pancytopenia

R/T Positions

Prefix	Meaning	Example(s)
Pro, Ante, Pre	Before	Prodromal, antepartum, precapillary
Post	After	Postnatal, posterior
Super, supra	Above	Superior, supraclavicular
Sub	Below	Submandibular, subcutaneous
Dors(o)	Back	Dorsoflexion, dorsal
Retro	Backwards	Retrograde, retrosternal
Para	Beside	Paramedic, paranasal
Re	Again	Rehydrate, recuperate
Later(o)	Side	Lateral
Medi(o)	Middle	Medial, mediastinum
Schizo	Split	Schizophrenia
Inter	Between	Intercostals, interdigital
Heter(o)	Different	Heterogeneous
Hom(o)	Same	Homozygous
Ad(o)	Towards	Adduction, adhesion, adrenal
Ab(o)	Away from	Abduction, abnormal
Anti, Contra	Against	Antigen, contraception
Endo, In, Intra	In, within, inside	Endocarditis, inhale, intrapartum
Ex(o), Ec(to)	Out	Exhale, ectopic
Epi	Upon, above	Epidermis, epigastric, epiglottis
Dia, Trans	Through	Diameter, transfusion
Peri, Circum	Around	Perinatal, circumcision
Sinister(a)	Left	OS (oculus sinister – left eye)
Dextr(o)	Right	OD (oculus dexter – right eye)

R/T the Body

Prefix	Meaning	Example(s)
Aden(o)	Gland	Adenoma, adenoids
Arthr(o)	Joint	Arthritis, arthroscopy
Cervic(o)	Neck	Cervical, cervicitis
Costo	Rib	Costochondritis, costovertebral
Cyto	Cell	Cytology, cytomegaly
Derm	Skin	Dermatitis, dermatological
Gastr(o)	Stomach	Gastritis, gastrointestinal
Glosso	Tongue	Glossopharyngeal, glossitis
Heme	Blood	Hematuria, hematemesis, hemangioma
Hepat(o)	Liver	Hepatitis, hepatocellular
Lingu	Tongue	Lingual, linguistic
Litho	Stone	Lithotomy, lithotripsy
My	Muscle	Myoma, myalgia
Myo, myel	Marrow	Myelitis
Neuro	Nerve	Neuromyalgia
Oto	Ear	Otitis, otolaryngology
Opti, Ocu	Eye	Optician, ocular
Osteo	Bone	Osteoarthritis, osteopenia
Pneum(o), Pulm	Lung	Pneumothorax, pulmonary
Psycho	Mind	Psychology, psychopath, psychosomatic
Rhino	Nose	Rhinorrhea, rhinitis
Thor(a)	Chest	Thoracic, thoracentesis
Vasc	Vessel	Vasculitis

Other Prefixes

Prefix	Meaning	Example(s)
A(n)	Without	Anemia, avascular
Auto	Self	Autoimmune
Dys	Difficult, painful	Dyspnea, dysuria
Gravida	Pregnant, heavy	Gravidity
Neo	New	Neonatal, neoplasm

III. Suffixes

R/T Surgery

Suffix	Meaning	Example(s)
Centesis	Tap, puncture	Thoracentesis
Ectomy	Removal	Mastectomy, appendectomy
Lysis	Separate, destroy	Hemolysis
Ostomy	Form an opening	Colostomy
Otomy	Cut into	Tracheotomy, craniotomy
Plasty	Repair	Rhinoplasty

R/T Diseases

Suffix	Meaning	Example(s)
Algia	Pain	Arthralgia, myalgia
Cele	Hernia, swelling	Hydrocele, cystocele
Emia	Blood	Leukemia, anemia
Gen	Producing	Carcinogen, allergen
Itis	Inflammation	Appendicitis, hepatitis

Megaly	Enlargement	Splenomegaly, hepatomegaly
Oid	Resemble	Fibroid, keloid
Oma	Tumor	Adenoma, myoma
Osis	Abnormal condition	Dermatosis
Pathy	Disease	Neuropathy, psychopathology
Penia	Deficiency	Cytopenia, thrombocytopenia
Phagia	Eating	Dysphagia
Phasia	Speech	Aphasia, dysphasia
Plegia	Paralysis	Paraplegia, quadriplegia
Phobia	Fear	Acrophobia, agoraphobia
Pnea	Air, breathing	Apnea, dyspnea, orthopnea
Rrhage	Burst forth	Hemorrhage
Rrhea	Flow, discharge	Diarrhea
Sclerosis	Hardening	Atherosclerosis
Spasm	Contraction	Bronchospasm
Troph(o)	Nourishment	Atrophy, hypertrophy
Uri(a)	Urine	Nocturia, dysuria

Other Suffixes

Suffix	Meaning	Example(s)
Gram	Picture, record	Electrocardiogram
Ology	Study of	Pathology, dermatology
Phon(o)	Sound	Egophony, bronchophony
Scope	Inspect	Microscope, laproscopic

TALK LIKE A NURSE

A-P	anterior-posterior	**BUN**	blood urea nitrogen
ASA	acetylsalicylic acid (aspirin)	**BX**	biopsy
A&W	alive & well	$\bar{c}$	with (cum)
bid	2x/day (bis in dies)	**CA**	cancer
BKA	below-the-knee amputation (AKA-above)	**CABG**	coronary artery bypass graft
BM	bowel movement	**CAD**	coronary artery disease
BMI	body mass index	**CAGE**	cut down, annoyed, guilty, eye opener
BMR	basal metabolic rate	**CAM**	complementary alternative medicine
BPH	benign prostatic hypertrophy	**CBC**	complete blood count
BR	bed rest	**CBE**	clinical breast exam
BRP	bathroom privileges	**CC**	chief complaint
BS	bowel sounds	**cc**	cubic centimeter
BSE	breast self-examination	**CHF**	congestive heart failure
BSO	bilateral salpingo-oophorectomy	**cm**	centimeter

CN	cranial nerve
CNS	central nervous system
C/O	complains of
Copd	chronic obstructive Pulmonary Disease
C&S	culture & sensitivity
Csf	cerebrospinal fluid
Ct	computed(computerized) tomography
Cta	clear to auscultation
Cts	carpal tunnel syndrome
Cva	cerebrovascular accident (stroke)
Cxr	chest x-ray
D/C	Discharge, Discontinue
D & C	dilatation and curettage
DFA	difficulty falling asleep
DJD	degenerative joint disease
DM	diabetes mellitus
DNR	do not resuscitate
DOA	dead on arrival
DOB	date of birth
DOE	dyspnea on exertion
DPT	diphtheria-pertussis-tetanus (vaccine)
DSM	diagnostic & statistical manual
DTR	deep tendon reflexes
DVT	deep vein thrombosis
Dx	diagnosis
ECG	electrocardiogram (or EKG)
ED	emergency department
EEG	electroencephalogram-gram
EMA	early morning awakening
ENT	ears, nose, and throat
EOM	extraocular muscles or movement
ERT	estrogen replacement therapy
ESR	erythrocyte sedimentation rate
ESRD	end-stage renal disease
ETOH	ethanol (alcohol)
FB	foreign body
FBS	fasting blood sugar
FUO	fever of unknown origin
FX	fracture
GERD	gastroesophageal reflux disease
GI	gastrointestinal
GU	genitourinary
H&P	history and physical
HA	headache
HBP	high blood pressure
Hct	hematocrit
HEENT	head, eyes, ears, nose, throat
hgb	hemoglobin
Hib	hemophilus influenza B
h/o	history of (or Hx)
HOB	head of bed
HPI	history of present illness
HRT	hormone replacement therapy
hs	hour of sleep, bedtime
HTN	hypertension
I & D	incision and drainage
IM	intramuscular
I & O	intake and output
IV	intravenous
IVP	intravenous pyelogram
JCAHO	Joint Commission on Accreditation of Healthcare Organizations
JVD	jugular venous distention
KUB	kidney, ureter and bladder (x-ray)
KVO	keep vein open
LE	lower extremities
LFTs	liver function tests
LMP	last menstrual period
LNMP	last normal menstrual period

LOC	loss or level of consciousness
LP	lumbar puncture
MI	myocardial infarction (heart attack)
MMR	measles, mumps, and rubella (vaccine)
MMSE	mini mental state exam
MRI	magnetic resonance imaging
MS	mental status or multiple sclerosis
NAD	no acute or apparent distress
NGT	nasogastric tube
NKA	no known allergies
NKDA	no known drug allergies
NPO	nothing by mouth (non peros)
NSAID	nonsteroidal anti-inflammatory drug
NSR	normal sinus rhythm
NSS	normal saline solution
NV	nausea/vomiting
NVD	nausea, vomiting, diarrhea
NWB	non-weight bearing
OA	osteoarthritis
OC	oral contraceptives
od	right eye (ocular dexter)
OOB	out of bed
os	left eye (ocular sinister)
OT	occupational therapy
OTC	over-the-counter
ou	both eyes
p̄	after
p.c.	after meals
PCN	penicillin
PE	physical examination or pulmonary embolism
PERRLA	pupils equal, round, reactive to light and accommodation
PID	pelvic inflammatory disease
PMH	past medical history
PMI	point of maximal impulse (apical pulse)
S/P	status post (after)
PND	paroxysmal nocturnal dyspnea or post nasal drip
PNS	peripheral nervous system
PPD	purified protein derivative (TB skin test)
pr	per rectum
PRN	as needed (pro re nata)
PROM	passive range of motion or premature rupture of membranes
PSA	prostate specific antigen (test)
PT	physical therapy
PTA	prior to admission
PUD	peptic ulcer disease
PVD	peripheral vascular disease
q4h	every 4 hours
q6h	every 6 hours
qam	every morning
qd	every day**
qh	every hour
qhs	every night
qid	4x/day
qod	every other day**
RA	rheumatoid arthritis or right atrium
RBC	red blood cell
REM	rapid eye movements
RLQ	right lower quadrant (RUQ, LLQ, LUQ)
R/O	rule out
ROM	range of motion or rupture of membranes
ROS	review of systems
RRR	regular rate & rhythm
R/T	related to
s̄	without (sans)
SBE	subacute bacterial endocarditis
SC	subcutaneous
Sig	label
SL	sublingual
SOB	shortness of breath

sp.gr.	specific gravity
S.Q.	subcutaneous(ly)
S/S	signs and symptoms
STAT	immediately
STS	serological test for syphilis
Sx	symptoms
TCDB	turn, cough, deep breathe
TIA	transient ischemial attack (mini stroke)
tid	3x/day
TM	tympanic membrane
TMJ	temporomand-ibular joint
TNTC	too numerous to count
TPN	total parenteral nutrition
TURP	transurethral resection of prostate
TSE	testicular self- examination
UA	urinalysis
UE	upper extremities
URI	upper respiratory infection
UTI	urinary tract infection
VS	vital signs
VSS	vital signs stable
WBC	white blood cell
WD/WN	well developed, well nourished
WF/BF	white female/black female
WM/BM	white male/black male
WNL	within normal limits
y/o	years old
△	change

**** appear on the JCAHO "Do Not Use" list – should write out "daily" or "every other day"**

Caution against using: < or >