PHYSICAL EXAMINATION OF ADULTS

A. General survey

Comment on whether patient appears acutely or chronically ill. Note LOC, signs of distress, gait, motor activity, dress, grooming, facial expression, affect, reaction to environment (as soon as you meet the client)

B. Vital signs: TPR, BP, Wt, Ht, O^2 Sat

C. Specific Systems

Always report in IPPA format even if exam not done IPPA

i. Inspection
ii. Palpation
iii. Percussion
iv. Auscultation

always compare one side of body with other whenever possible

Psychological Assessment

Judgement: insight (accuracy of life situation), hallucinations (actual perceptions without stimulation), illusions (misperceptions of present stimuli)

Orientation: attitude, perception re: hospitalization, expectations, cooperation, negativism.

Memory: impoverished, blocked, rigid, pre-occupied, loose effluent.

Affect: Appearance: neat, untidy, eccentric, disheveled.
Facial expression: mobile, animated, fixed, anxious, distressed, angry, twitches.
Motor activity: immobile, restless, agitated, clumsy, fidgeting, hand wringing, picking at clothes

Consciousness: alert, drowsy, stuporous, response to interviewer: friendly, hostile, indifferent, nervous, suspicious, anxious.

Speech: relevance, coherence, rate, stuttering, loudness, halting.

Head and Neck

Head: Inspect/palpate

Hair: distribution, texture

Scalp: scaling, lesions, occult injury

Skull: general contour, tenderness, crepitation

Face: Expression, symmetry, edema, skin (texture, pigmentation, lesions, hair distribution)

Eyes: *Inspect:*

Vision: visual acuity
EOM (six cardinal fields of vision)
External ocular structures: eyebrows/lids, eyelashes, conjunctiva/sclera, lachrymal glands for redness, discharge, lesions symmetry (of position & movement), transparency of iris.

Globes: look for exopthalmus and palpate for rigidity

Pupils: shape, size, consensual reaction to light

Funduscopic exam: Red reflex

(Further detail in ophthalmology class/lab i.e. corneal exam)

Ears: Inspect/ palpate

Auricle: alignment & position, shape & symmetry, skin integrity

Canal: discharge, cerumen, foreign body, swelling, redness, tenderness

Drum: color, light, reflex, landmarks, bulging or retraction, perforation, scarring, air bubbles of fluid, movement on insufflation

Hearing: Assess each ear roughly (eg. Hearing a watch tick or whisper)

Nose: inspect for:
Discharge, mucosa, septum, bleeding, polyps, palpate frontal and maxillary sinuses and nose for tenderness

Mouth/oropharynx:

Inspect/palpate:
Color of lips and mucosa, hydration
Condition of teeth and gums, tongue (ventral surface), palate
Lesions, ulcers, odor
Tonsils color & exudate
Uvula midline, soft palate rises symmetrically

Neck: inspect/palpate

Nodes

Thyroid gland, cricoid/thyroid cartilage, trachea
Masses
Symmetry of neck muscles

Lower Respiratory System

compare one side with the other Oximetry & peak flow metre if necessary.

Inspection: color, central cyanosis?
Shape of chest
Scars
Use of accessory muscles, rate, rhythm, effort
Clubbing
Asymmetry

Palpation: Areas of tenderness, masses, nodes, location of trachea,
Chest expansion, Fremitus, eg. "Ninety-nine"

Percussion: Resonance, dullness, hyperresonance, or tympany?
Diaphragmatic excursion (in cm. bilaterally)

Auscultation: **1.** breath sounds:
air entry throughout chest (good, equal, decreased, absent)
bronchial, bronchovesicular, or vesicular. ? Prolonged expiration

2. Added or adventitious sounds:

Wheezes (rhonchi). Whistling sounds resulting from pathology in bronchial tree. May disappear or move with coughing. Should be bilateral Heard mostly on expiration. Some are higher pitched, others are lower pitched.

Crackles (rales). Crackling sounds resulting from pathology in terminal air sacs. Usually unaffected by coughing. Unilateral or bilateral; Heard mostly on inspiration can be fine or coarse.

Cardiovascular System

Inspection: Jugular venous pressure (JVP), visible pulsations @ apex

Palpation: Apex beat (PMI): Note location - ? interscape mid-clavicular line
Note diameter, well localized or diffuse. Heave at apex of left sternal border? Thrills anywhere on precordium?
Pulsations.

Auscultation: Listen at apex, aortic area, pulmonic area, and left sternal border for:

1. Heart Sounds:

Identify 1st and 2nd sounds (are they normal?)
Any extra beats noted?
Rhythm: regular or irregular

2. Murmurs:

Timing (systolic or diastolic)
Location, where heard the loudest
Radiation to axilla or neck

Peripheral Vascular System

Always compare one side with the other

Inspection: color of extremities (?peripheral cyanosis)
Texture of skin (? Atrophic)
Nailbeds, hair distribution
Ulcers or pigmentation
Varicose veins
Swelling

Palpation: Peripheral pulses (radial, brachial, femoral, dorsalis, pedis, posterior tibial) Rhythm (radial pulse) Pulse volume (symmetry)
Whether radial and femoral pulses synchronous
Note temperature of feet and legs
Pitting edema of ankles and legs (0-4)
Check sacrum if patient in bed. Capillary refill
Circumference of extremity if applicable

Auscultation: Bruits (carotid, renal, iliac, femoral)

Lymphatic System

Inspect nodes for redness (local or streaking?), swelling. Palpate nodes for size, symmetry, firmness, tenderness, mobility in:
Head and neck: pre-auricular, posterior auricular, anterior/posterior cervical chain, occipital, submandibular, submental, tonsillar, supraclavicular. Axilla/breast, arm (Epitrochlear), groin (inguinal)

Gastrointestinal System

Abdomen:

Inspection

Skin: Jaundice, spider nevi, striae, rashes, lesions, scars, palmer erythema (hands).

Abdomen: Contour, symmetry
Dilated veins, visible pulsations
Visible hernias, masses
Movement with respirations
Umbilicus

Auscultation: Bowel sounds (are they resent?)
Vascular sounds (bruits)

Internal genitalia:

Inspect via speculum exam:

Cervix and os. Note color, position, characteristics of its surface, ulcerations, nodules, masses, polyps, bleeding, or discharge
Obtain samples as required (further detail in class) observe vaginal walls (mucosa, color, inflammation, discharge, ulcers, or masses) while removing the speculum

Bimanual exam

Palpate: Cervix & uterus (Note position, shape, consistency, mobility, and tenderness) Vaginal walls. Each ovary/adnexa

Male

Inspect: Pubic hair, penis & scrotum (note sexual maturity if adolescent) for general characteristics, color, lesions & discharge (describe). Glands penis (patient retracts prepuce if present, note ease of movement) and urethra meatus for color lesions, nodules, & discharge. Scrotum for general characteristics, color, swelling lesions. Inguinal regions for bilging.

Palpate: Penis for tenderness & induration/nodules. Scrotum for testes, epididymides, and vas deferens (simultaneous) for location, consistency, tenderness, & nodules/ masses. Inguinal canal for hernia, lymph nodes. Prostate exam/anal rectal Intactness (see GI rectal exam)

Breast

Inspect/palpate:

Female: Size, shape, symmetry, & contour
skin appearance, color, pigmentation, rashes, lesions, vascularity, & surface characteristics (dimpling, bulging, retractions) areola color, surface characteristics, symmetry. Nipple symmetry, scaling, erosion, discharge, presence of supernumeracy nipples. Temperature, palpate systematically in all quadrants and axilla for masses, consistency, associated swelling with the lymphatic system.

Male: Inspect/palpate fro masses, swelling, tenderness

Musculoskeletal System

Compare one side of the body with the other Look for evidence that patient can perform activities of daily living. Observe from first meeting of the client (gait, posture etc).

Inspection: Redness, discoloration
Swelling
Deformity/symmetry
Bony enlargement
Muscle wasting/spasms
Subcutaneous nodules

Palpation:	Tenderness Heat Effusion (bulge test and ballottement for knees) Joint instability (knees) Strength Range of motion: ? Decreased/increased (mild, moderate. Severe) ? Pain on movement Crepitation Straight leg raising for back problems
TMJ joint:	Tenderness, ROM, or crepitation
Neck:	Posture, deformities For ROM, ask patient to: 1. Touch chin to chest (flexion) 2. Touch ear to shoulder (rotation) 3. Extend the head back (extension)
Hands & wrists:	Identify involved joints and describe: For ROM ask patient to: 1. Make a fist (flexion) and extend and spread fingers (extension) 2. Move hands laterally and medially (ulnar and radial deviation). Flex and extend wrists. Note tenderness, subluxation, deviation, muscle wasting. Note Heberden's or Bouchard's nodes (arthritis) perform Phalen's and Tinel's sign (if suspecting Carpal Tunnel syndrome)
Elbows:	ROM: flexion, supinate, pronate
Shoulders:	ROM: flexion, extension, abduction, adduction, rotation (internal/ external)
Spine:	Note cervical, thoracic, and lumbar curves (from side and behind). Note alignment of iliac crests & shoulders. Palpate spinal processes & paravertebral muscles for alignment/tenderness. For ROM ask patient to: 1. Bend sideways (lateral bending) 2. Bend backward toward you (extension) 3. Twist both ways (rotation) Check straight leg raise on each side (when supine) if symptoms of disc irritation.
Hips:	Leg shortening or unilateral rotation of one foot? ROM: flexion, extension (& hyperextension), rotation (external/internal) Abduction, adduction.
Knees:	Effusion-patellar ballottement, bulge sign Cruciate ligament stability (drawer test) Collateral ligaments stability Note quadriceps wasting ROM: flexion and extension only

Feet and Ankles: Identify the involved joints and describe
Feel along Achilles tendon
Screen metatarsophalangeal joints (compression overmetatarsal heads) and flexion of toes
ROM: inversion, eversion of tibiotalar, and subtalar joint of ankle

Neurological System

Level of consciousness: A+O x4 (time, place, & purpose), Glascow Coma scale if applicable.

- Mental status (As presented in class and lab)
- Speech
- Posturing

Above is assessed while taking the history as well.

2. Cranial Nerve Assessment

CRANIAL NERVES

Compare one side with the other

Number	Name	Type	Functions	Test
1	Olfactory	Sensory	Smell	Not usually tested
2	Optic	Sensory	Vision	Visual acuity Visual fields
3 4 6	Oculomotor Trochlear Abducens	Motor	Eye movements	Pupils and eye movements
5	Trigeminal	a) Motor b) Sensory	a) Chewing movements b) Sensation of face, scalp	a) Clench teeth Open jaw b) Sharp and dull sensation of forehead, cheek, chin c) Corneal reflex (not usually tested)
7	Facial	a) Motor b) Sensory	Facial expression Symmetry b) Taste	a) Raise eyebrows Frown Close eyes tightly Show teeth Smile b) Not usually tested
8	Acoustic	Sensory	Hearing, Sense of Balance	Test hearing
9 10	Glossopharyngeal Vagus	a) Motor b) Sensory a) Motor b) Sensory	a) Swallowing b) Taste a) Swallowing b) Sensation on throat	Patient says "ah" Check palate and uvula for movement and symmetry. Gag reflex Hoarseness
11	Spinal Accessory	Motor	Shoulder Movements	Shrug shoulder against resistance. Turn head against resistance
12	Hypoglossal	Motor	Tongue Movements	Pt. sticks out tongue. Tongue against each cheek. Check symmetry, atrophy.

3. Motor function:	**Hands & Arms:**	Involuntary movement (tremors, tics, irregular movements) Muscle bulk Tone Power (0-5) Reflexes (biceps, triceps, radialis) (0-4+)
	Legs:	Muscle bulk Tone Power (0-5) Clonus Reflexes (patellar, Achilles, plantar response) (0-4+)
4. Sensation:		(face, arms, chest, abdomen, legs & feet) Light sensation with Kleenex Sharp pain sensation. Use a broken Tongue depressor or some other pointed disposable object. Do not use anything that will break the skin. Use microfilaments for the diabetic foot.
5. Cerebellar function:		Finger-nose test Rapid hand movements Heal-shin test Gait Romberg test
Test for meningeal irritation if indicated:		Neck stiffness Kernig's sign Brudzinski's sign

Skin

Inspect/palpate:	Color, pigmentation, redness, pallor, cyanosis, janndice, moisture (mucosa)
Vascularity:	Bruising, Petechiae, abnormal veinous patterns Turgor, temperature
Lesions:	Color, anatomic location and distribution (generalized or local) Type – macule, papule, nodule, wheal, erosion, ulcer, vesicle, bulla, pustule, mole, wart, calluses.
Nails:	Infection, ingrown toenail
Hair:	Quantity, distribution, texture

Summary / Conclusions

Positive & pertinent negatives from both history & exam
Diagnosis and problem list
Differentials
Management plan within the context of a northern First Nations community, including health teaching, education, anticipatory guidance, follow up plans, and evaluation.

Adapted from the following texts:

Bickley, L, S. (1999). *Bates' Guide to Physical Exam and History Taking (7th ed.)* Philadelphia, PA: Lippincott, Williams & Wilkins

Swartz, M. (2002). *Textbook of Physical Diagnosis: History and Examination (4th ed.)* Toronto, ON: W.B.

Thompson, J.M. & Wilson, S.F. (1996) *Health Assessment for Nursing Practice* (1st ed.). St. Louis MI: Mosby – Year Book, Inc.